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Rhodophyllus Notebook 6

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* ENTOLOMA PLUTEIFORME Murr.

North Amer. Flora 10:121. 1917

Pileus 5 cm. broad, convex, not fully expanding, umbonate, umbrinous-avellaneous, dry, glabrous, striate.

Lamellae adnexed, light pink to salmon-colored, medium broad, rather crowded, edges entire.

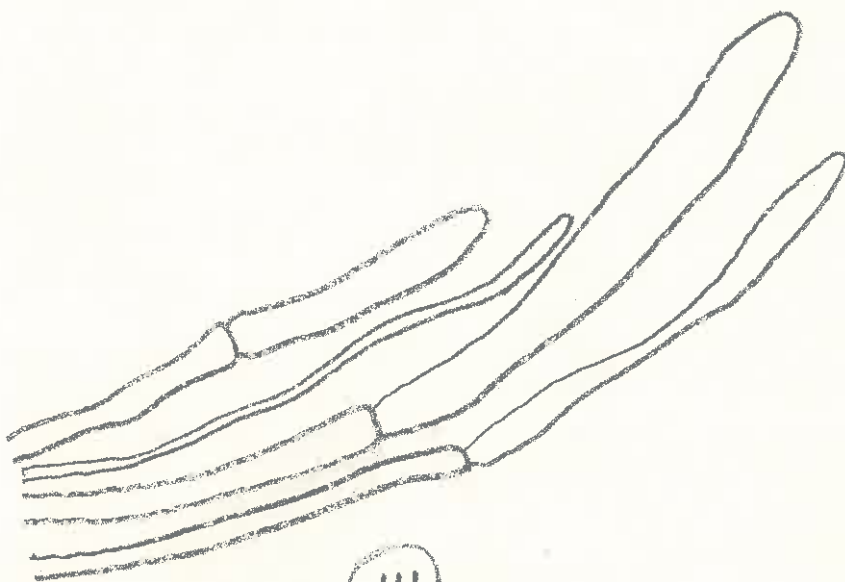
Stipe 5 cm. x 5 mm., whitish, glabrous, tapering upward from a somewhat enlarged base.

Spores 9-10 (11) x 7.5-8.5 μ , 5-6-sided, at times obscurely 5-7-sided, more rarely subquadrate. Basidia 31-40 x 8-11 μ , 2-4-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel, hyphae 5-12 μ broad. Pileus trama radial. Cuticle repent, with small tufts more or less uplifted, the terminal elements cystidioid. ^{connections} Clamp~~x~~ and lactifers none.

Habit, habitat, and distribution. - On soil, in woods, New York, October.

Material studied. - NEW YORK: Murrill & Volkert, ^{the type} New York Botanical Garden, Oct. 8, 1911.

Eutoloma pluteiforme Murr.
Type



(III)

Pilo - X 1000

LEPTONIA POLIOPA (Romagn.)

(Bas-Aug. 23, 1954; Tenn.-26253)

Notes by Bas

Cap up to 59 mm, from deeply umbilicate convex to deeply infundibuliform, hygrophanous, dark sepia-brown when moist (with bluish tinge when young) and translucently striate up to the center, when dry bluish gray-brown, when ^{young} ~~you~~ grayish sepia, fibrillose to scaly on pale background when old; large specimen very irregular.

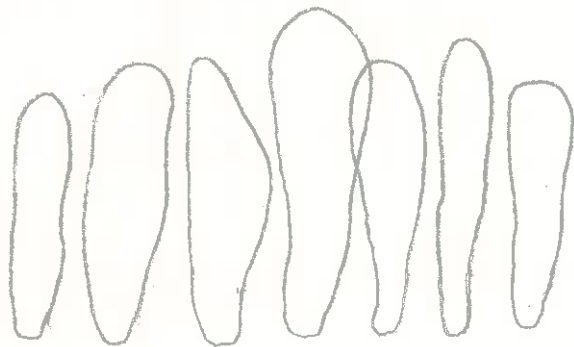
Gills subdecurrent, thin, rather distant, pale brownish pink with dark blue, later on dark brown ~~x~~ edge which is crenulate.

Stem 31-75 x 1-8 mm, cylindrical or slightly flattened, steel-blue when young; later on pale gray-brown at apex (but sometimes entirely!), minutely pubescent, with white tomentum at base, slightly polished.

Notes by Hesler

Spores 10-13 x 7-8 μ , 5-6-sided, at times obscurely 5-8-sided and more or less nodulose or subnodulose. Basidia 27-32 x 7-9 μ , 4-spored. Pleurocystidia none; cheilocystidia 32-44 x 7-12 μ , clavate, clustered, with fuscous contents (giving a bluish or brownish edge to some gills). Gill trama subparallel, hyphae 3-6 μ broad. Pileus trama radial. Cuticle of repent hyphae, bearing clavate, brownish pilocystidia. Clamp connections none.

Leptonia polioptus (Romagn.)
Bas, Aug 23-54



Ch - x 1000

LEPTONIA POLITA (Fr.) K. & M. sensu Lange?

(Bas-2412; Tenn.-26252)

Notes by Bas

Cap (15-)20-35(-42) mm, mostly convex to plano-convex with shallow central depression in which often a vague umbo, but sometimes not depressed at all, becoming rather irregular with age, hygrophanous, moist, resembling Lange 200 D very much (moderately dark cafe-au-lait; often slightly grayer than Lange's figure), 1/2 to 3/4 translucently striate, more or less silky fibrillose, thin, rather flaccid; when dry very pale grayish cafe-au-lait, never viscid. Flesh whitish, cartilaginous in cortex of stem. Smell distinctly farinose when cut; later on, unpleasant smelling (decaying cabbage). Taste farinose with unpleasant aftertaste.

Gills 20-28, 3.7 lamellulae, rather distant to rather crowded, narrow and adnate-sub-decurrent to broad and adnexed, white to dingy white, becoming dingy flesh-colored pink, thin, edge often more or less irregular.

Stem 25-47 x 1.5-4 mm, cylindrical or slightly attenuated upward, at first grayish-brownish, ringed white, later on concolor with cap but slightly paler, polished-fibrillose, slightly primose at apex.

Notes by Hesler

Spores 10-14.5 x 7-9 μ , 6-sided, at times indistinctly 6-7-sided and subnodulose. Basidia 37-44 x 7-8 μ , 1-2-4-spored,

apices usually more or less pointed and, without spores, are suggestive of pleurocystidia. Pleurocystidia and cheilocystidia none. Gill trama subparallel, hyphae 5-9 μ broad. Pileus trama radial. Cuticle of repent hyphae, bearing clavate, brown pilocystidia. Clamp connections none.

This is near L. earlei (Murr.) Murr., which is not striate, has a mild odor and taste, distant gills, stipe pale tan.

(not like
Bas 2412)

ECCILIA POLITA (Fr.) Kummer

See *Rhombiophora*
(in this book)

Coll. by George F. Atkinson, Blowing Rock, N. C.,
Aug. 19-Sept. 19, 1899, Cornell No. 3999, and sent
to Bresadola, who in turn apparently sent it to
Stockholm.

Spores 9-11 x 8-9 μ , quadrate or 5-sided. Basidia
27-33 x 10-12 μ , 2-4-spored. Pleurocystidia and cheilocystidia
none. Gill trama subparallel. Pileus trama radial. Cuticle
repent, with scattered scales composed of colorless to fuscous
clavate, cylindric, or fusoid pilocystidia. Clamps and lactifers
none.

The spores here are different from those of *E. polita*
sensu Lange, but seem to agree with *E. polita* sensu Bresadola.

= *Leptonia polita* (Fr.) Kovrad & Muhl. 1948.
R. politus (Fr.) Quel., 1886. sensu Lange, K + R.

Ecilia polita Fr.
from Stockholm (Atkinson's coll. from
N.C., No. 3999).



Aede - *philoscyptidia* - $\times 1000$

P. D. Orton

LEPTONIA POLITA (Pers. ex Fr.) ~~Konrad & Maublanc~~
Trans. British Myc. Soc. 43(2): 178. 1960
from Edinburgh, Royal Bot. Garden, coll. P. D. Orton, Oct. 9,
1954, No. 264, from Elstead 1a, Surrey.

Spores 9-10 x (6) 7-8 μ , 5-6-sided. Basidia 30-38 x 9-11 μ , often constricted below the middle, 2-4-spored. Pleurocystidia and cheilocystidia none. Subhymenium a narrow zone of small cells. Gill trama subparallel, hyphae 7-12 μ broad. Pileus trama radial (appearing as cells in tangential sections). Cuticle repent, with a few, scattered more or less uplifted, colorless hyphae, the terminal elements of which are cylindric-clavate and cystidioid. Clamps and lactifers none.

The spores here agree with those of Lange, but not of Atkinson and Bresadola.

Leptonia polita (Pers. ex Fr.) K. & M.

from Edinburgh, Orton No. 264, Oct. 9, 1954



Pilocephidia - x 1000

10202

~~10202~~

ENTOLOMA

pratensis sp. nov.

~~also 11205~~

~~(X) (X) (X) (X) (X)~~

Pileus 3-7.5 cm. broad, slightly convex becoming expanded, plane or slightly and broadly depressed, at times wavy, radiately rivulose, or ridged, brownish fibrillose, silky and shining, disk squamulose, ^{slightly} ~~not~~ hygrophane, "fuscous," "clove brown" to "sepia" (when wet), "Saccardo's umber", "buffy brown" to "dresden brown" (when dry), somewhat zonate, ~~viscid~~, ^{cuticle} ~~pellicle~~ separable, pellucid-striatulate, margin slightly surpassing the gills and usually incurved. Context fragile, pallid, dark (watery brown) when wet, thin; odor and taste mild.

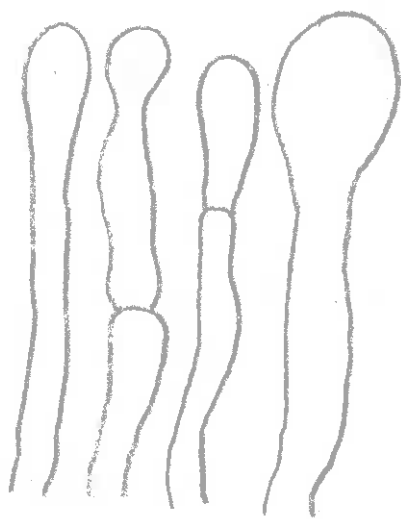
Lamellae slightly adnexed to emarginate or uncinata, grayish becoming "fuscous", broad (up to 7 mm. broad), subventricose, broadest behind, narrowed in front, subdistant, face of gills streaked or ribbed vertically, venose-connected to anastomosed, edges even.

Stipe 2.5-3.5 cm. x 8-15 mm., compressed, hollow, silky-fibrillose, tapering downward, concolor, not viscid, fleshy with outer rind fibrous and sub-cartilaginous, not separable from pileus.

Spores 9-11.5 x 6.5-8.5 μ , mostly 6-8(-or more)-sided, occasionally 5-sided, more or less nodulose, color in deposits: "cinnamon rufous" to "ferruginous." Basidia 33-45 x 10-12 (14) μ , 2-4-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel, hyphae 10-16 μ broad. Pileus trama radial. Cuticle more or less a trichodermium, often distinctly so, the terminal hyphae either cystidioid or distinctly as pilocystidia; the squamules composed of tufts of pilocystidia which are colorless,

Entoloma No. 10202
pratensis sp. nov.

~~Type~~



Pilo - x 1000

clavate, often more or less capitate. Clamp connections none. Lactifers in the pileus trama.

HABIT, HABITAT, AND DISTRIBUTION - On lawns, Tennessee, January-February.

MATERIALS STUDIED - TENNESSEE: Hesler 10202, type from Island Home, Knoxville, leg. G.M.Bentley, January 20, 1937; 11202, 14139.

OBSERVATIONS * The costate gills suggest E. costatum which has smaller spores; and subcostatum which is dry, has globose ~~sphaer~~ or subglobose spores, and is glabrous. E. rhodopolium has white gills, smaller spores, and a different pileus. From E. clypeatum it is separated ~~in~~ by the latter having white context and white gills.

11205

ENTOLOMA pratensis sp. nov.
(same as 10202)

Pileus 2.5-5 cm. broad, convex, very fragile, splitting in age, usually depressed-umbilicate, at first minutely fibrillose, disk at times squamulose, glabrescent and silky-shining, scarcely hygrophanous, not viscid, "fucous" or "clove brown," or near "chaetura drab," paler with age, margin even or striatulate. Context thin, whitish; odor and taste none.

Lamellae attachment variable: uncinata, adnexed, adnate, adnate-subdecurrent, concolor to pileus, broad, ventricose, close to subdistant, edges eroded to denticulate.

Stipe 2-3 cm. x 4-10 mm., concolorous, apex white-floccose, hollow, fragile.

Spores angular, apiculate, 6-7(8)-sided, 9-11 x 6.5-7.5 μ , color in mass "russet-vinaceous" or "vinaceous tawny," Pleurocystidia and cheilocystidia none. Gill-trama parallel. Cuticle as in 10202.

Pileus 10-15 mm broad, conic with a small umbo, cinnamon, glabrous, striatulate when wet. Context thin and submembranous.

Lamellae narrowly attached, crowded, narrow, thin, flesh-colored.

Stipe 2-3 cm x 1-1.5 mm, brownish, apex slightly pruinose, base white-mycelioid, elsewhere glabrous, equal.

Spores 8.5-12 x 7.5-9 μ , 5-sided. often indefinitely 4-5-sided and subquadrate. Basidia 25-32 x 8-11 μ , 2-4-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel, hyphae 4-10 μ broad. Pileus trama radial. Cuticle of repent hyphae. Clamps and lactifers none.

Near N. delicatula (Pk.) Sacc., which has a white stipe and its spores not more or less subquadrate, and has tufts of pilocystidia. Near 9242 which is silky-shining, and has smaller spores (8.5-10 x 6.5-7.5 μ). Differs from minuta which is pallid (grayish to gray brown) with a dark disc (no umbo).

11437

NOLANEA PRISMOSPORA sp. nov.

TYPE

Pileus 2.5 cm broad, conic-campanulate, papillate, silky shining, zonate, hygrophanous, dingy brown or grayish-brown (not matched in Ridgway), margin even, striatulate when moist. Context thin, concolorous; odor mild, taste slightly farinaceous-astringent.

Lamellae adnexed, grayish, then "pinkish cinnamon," ventricose, medium broad to narrow, close.

Stipe 4-8 cm long, 1-2 mm thick, dark brown, base white mycelioid, elsewhere with scattered white fibrils (observed only under lens), hollow, cartilaginous.

Spores 8.5-11 x 7-8.5 μ , irregularly 4-5-sided, and more or less nodulose. Basidia 31-36 x 10-11 μ , 2-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel, hyphae 7-15 μ broad. Pileus trama radial. Cuticle repent, not gelatinous. Pilocystidia, clamps, and lactifers none.

11531

NOLANEA PRISMOSPORA sp. nov.

Pileus 1-2 cm broad, campanulate, expanding slightly, papillate, dingy-brown (not matched, near "sayal brown"), glabrous, margin striate when moist. Context thin, nearly membranous; odor and taste slightly farinaceous.

Lamellae sinuate, nearly close, subventricose, dingy whitish becoming salmon-colored, edges even.

Stipe 4-6 cm x 1-2 mm, pale brownish, glabrous, apex pruinose, base white-mycelioid, hollow.

Spores 8.5-11 x 7-8 μ , irregularly 4-5-sided, more or less prismatic. Basidia 28-35 x 8-10 μ , 2-4-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel, hyphae 7-10 μ broad. Pileus trama radial. Cuticle repent, with some colorless more or less erect, septate hyphae. No pilocystidia, no clamps, and no lactifers.

ENTOLOMA PUBESCENS Murr.

North Amer. Flora 10:119. 1917

Pileus 5-8 cm broad, irregularly expanded, gregarious or caespitose, cinerous, densely silky-pubescent, margin even.

Lamellae adnate or broadly adnexed, flesh-pink, crowded, rather narrow..

Stipe 4-6 cm long, 8-12 mm thick, whitish, densely hirsute-pubescent, solid, enlarged at the base.

Spores 7.5-9 x 5-6 μ . 5-6-sided, Basidia 28-36 x 7-9 μ . 2-4-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel, hyphae 3-6 μ broad. Pileus trama radial. Cuticle of repent hyphae, with some free ends more or less erect. Pilocystidia none. Clamp connections and lactifers none.

HABIT, HABITAT, AND DISTRIBUTION - On soil, in Palmetto Swamp. Alabama, December.

MATERIAL STUDIED - ALABAMA: Earle, type, from ^{near} ~~south~~ of Auburn, December 21, 1899(NY).

OBSERVATIONS - The cinerous color and densely pubescent pileus and stipe are distinguishing characters. The description of microscopic characters above is based on my study of the type.

19229

ENTOLOMA PULLUS sp. nov.

Pileus 2.5-3.5 cm broad, convex, slightly hygrophanous, "drab," disc "hair brown," with few scattered white fibrils, disc rugulose, margin striatulate. Context thin, "drab"; odor and taste mild.

Lamellae narrowly emarginate, ashy then flesh, broad, ventricose, narrowed in front, rather close, edges even.

Stipe 5-7 cm long, 3-4 mm thick, equal, twisted, dingy grayish, fibrillose-striate, mealy at apex, base strigose, hollow.

Spores 8-9.5 (10) x (6) 7-8 μ , 5-sided, subglobose, angles rather sharp, color in deposit: "russet." Pleurocystidia and cheilocystidia none. Gill trama subparallel, hyphae 7-14 μ broad. Pileus trama radial. Cuticle repent, surface hyphae rarely uplifted, and very rarely the terminal elements clavate-cystidioid. Clamps and lactifers none.

HABIT, HABITAT, AND DISTRIBUTION - On debris, edge of pine woods, Tennessee, August.

MATERIAL STUDIED - TENNESSEE: Hesler 19229, type, in debris, pine woods, near Knoxville, August 23, 1949.

OBSERVATIONS - This strongly resembles Entoloma cordae Karst., as illustrated by J. Lange (1936), which according to Orton (1960) is a synonym with E. turbidum (Fr.) Quel. The spores of E. cordae are smaller and with more rounded angles than in our No. 19229.

19229- *Eutoloma pullus* sp. nov.

Type

(orig. called cordae)

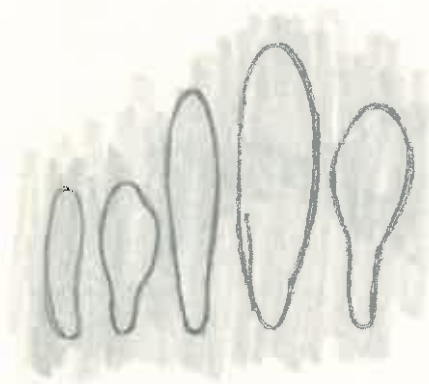


19229 - *R. pullus*

Leptonia putida sp. nov.

No. 24491

Type



ch - x 1000

AGARICUS (ECCILIA) PYRINA B. & C.

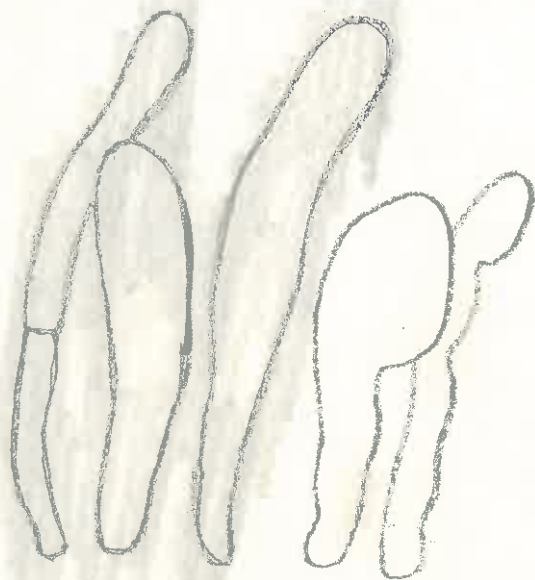
The Type

(from Kew Gardens, March, 1962)

Spores 8.5-11 x 6-8 μ , 5-sided, at times obscurely
5-6-7-8-sided. Basidia 28-34 x 7-9 μ , ^{the number of} ~~no~~ spores doubtful).
Pleurocystidia and cheilocystidia none. Gill trama sub-
parallel (width of hyphae?). Pileus trama radial. Cuticle
repent.

Leptonia No. 25795

pyrina (B. + C.) comb. nov.



Pilo - x 1000

(pale fuscous)



147
Eccilia pyrina (B.&C.) Sacc. - Type
X 1800

LEPTONIA RHODOCYLIDIOIDES (Atk.) comb. nov.

Eccilia rhodocyliidioides Atk., Jour. Myc. 8:113. 1902.

Pileus 5-12 mm broad, convex, umbilicate, mouse-colored, center finely floccose-scaly, margin faintly striate. Context very thin.

Lamellae arcuate, decurrent, slightly paler than the pileus and tinged flesh-color, bristling with cystidia seen under a lens, medium close, broad.

Stipe 3-5 cm x 1-2 mm, concolorous, apex paler, cartilaginous, hollow.

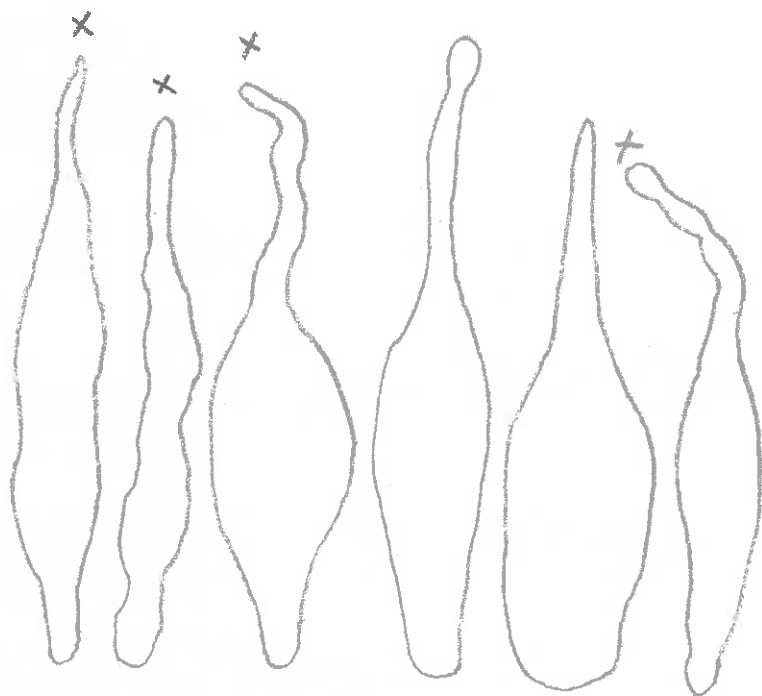
Spores 10-12 x 7-9 μ , 4-5-sided. Basidia 26-32 x 8-12 μ , 2-4-spored. Pleurocystidia 73-85 x 7-20 μ , versiform (bottle-shaped, ventricose, subcylindric), appendiculate, often irregular, projecting conspicuously; cheilocystidia 46-66 x 9-20 μ , similar. Gill trama of subparallel hyphae; Pileus trama of radially disposed hyphae. Cuticle of repent hyphae, with scattered tufts of fuscous pilocystidia which are obclavate to subcylindric or clavate .

Habit, Habitat, and Distribution - In woods, New York, August.

Material Studied - NEW YORK: Atkinson 18465 (CUP), McGowan's Woods, Ithaca, Aug. 8, 1904. This is not the type, which was examined and found too sparse to permit sectioning for study.

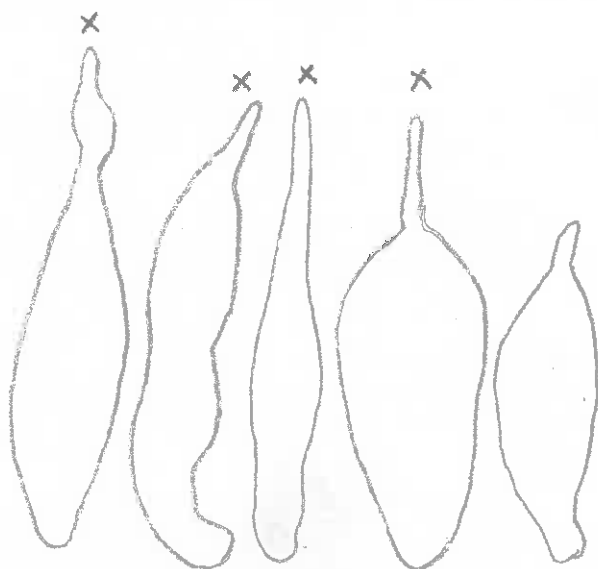
Observations - The description of microscopic characters above is based on a study of Atkinson's No. 18465 (not the type). The large pleurocystidia and cheilocystidia are distinctive.

Exilia rhodocylicoides Attk.
Atkinson No. 18465



Pl - x 1000

(46)



Ch - x 1000

(47)



(48)

Pilocyphidia - x 1000.



Eccilia rhodocyclusioides Atk. - Type

X ²⁰⁰⁰
~~2000~~

LEPTONIA RHODOCYLIX (Lasch)

Bas-2545, Zuid-Holland, det. Maas Geesteranus, Aug. 19, 1950.

Pileus 1.5-2 mm broad. Gills decurrent.

Spores 8.5-11.5 x 7-8.5 μ , subglobose or ovoid, 5-sided.
Basidia 23-30 x 8-11 μ , 4-spored. Pleurocystidia none;
cheilocystidia none (Lange says absent; K & R say present,
with an ampullaceous base and slender neck). Cuticle of hyphae,
bearing some scattered, semi-erect, colorless hyphae; no
pilocystidia.

(Bas sent no notes.)

x

ECCILIA RHODOCYLIX Lasch

from Edinburgh, Royal Bot. Garden, coll. D. M. Henderson,
Sept. 13, 1958, No. 4205.

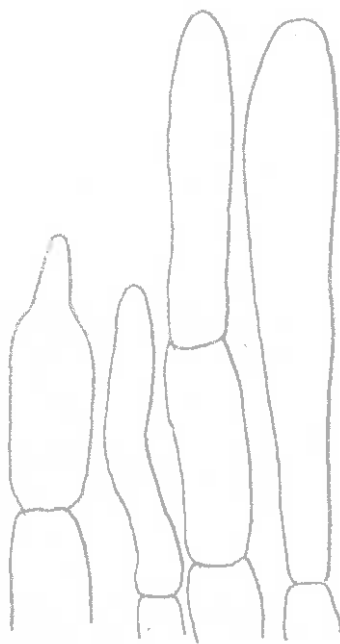
(The material is so meagre that only a tiny fragment
was mounted and crushed for study. No sections were made.)

Spores 10-11 (12) x 7.5-9 μ , 5-6-sided. Basidia 35-43 x
10-12 μ , 2-4-spored. Pleurocystidia and cheilocystidia none
found. Pilocystidia clavate-cylindric, fuscous, granulated.
Cuticular hyphae granulated.

See Range; also Bresadola - for macroscopic
characters.

Ecilia rhodocylix Farsch

from Edinburgh, coll. D.M. Henderson, Sept.
13, 1958, No. 4205



Pilosity - x 1000

ENTOLOMA RHODOPOLIUM

On bare soil under Tilia, Stockholm, June 3, 1926, leg.

L. Romell, No. 14410 (U.T. No. 28955).

Spores 9-11 x 8-9 μ , subglobose, 6-7-sided. Basidia 34-43 x 10-12 μ , 4-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel, hyphae 4-7 μ broad; subhymenium slightly gelatinous. Pileus trama radial. Cuticle radial, repent, surface hyphae colorless, a few uplifted, at times a narrow zone of slightly gelatinous hyphae. Clamps few, on surface hyphae. Lactifers none. Caulocystidia none.

ENTOLOMA RHODOPOLIUM

On bare soil under Tilia, Stockholm, June 3, 1926, leg.

L. Romell, No. 14410 (U.T. No. 28955).

Spores 9-11 x 8-9 μ , subglobose, 6-7-sided. Basidia 34-43 x 10-12 μ , 4-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel, hyphae 4-7 μ broad; subhymenium slightly gelatinous. Pileus trama radial. Cuticle radial, repent, surface hyphae colorless, a few uplifted, at times a narrow zone of slightly gelatinous hyphae. Clamps few, on surface hyphae. Lactifers none. Caulocystidia none.

Pileus 5-12 cm broad, at first conic-campanulate, finally wavy-expanded, often umbonate, "olive buff" to olive brown or grayish-brown, slightly viscid, somewhat hygrophanous, glabrous, even, at times radiately rugose and splitting. Context white, thin, firm; odor and taste farinaceous.

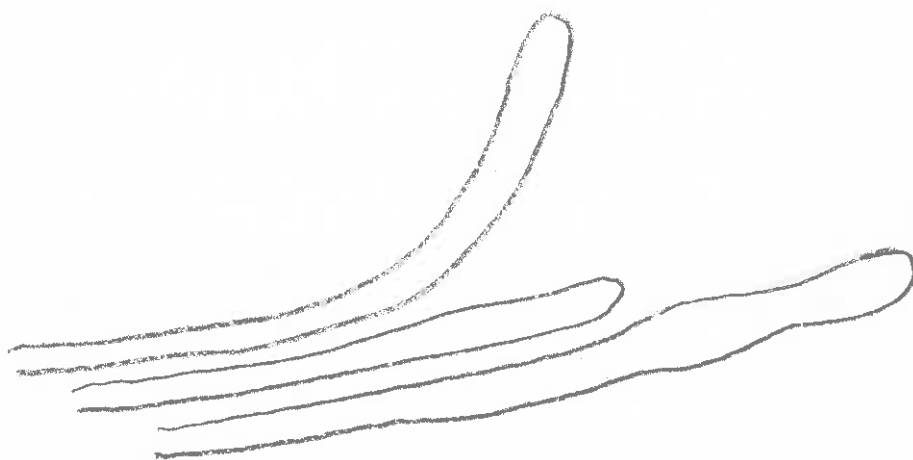
Lamellae adnate, then adnexed, whitish then "vinaceous buff," finally "pinkish cinnamon," ventricose, broad at maturity, subdistant, edges even.

Stipe 8-13 cm long, 8-16 mm thick, white, shining, often flexuous, cartilaginous, equal or tapering upward, spongy, dry.

Spores 9.5-10(11) x 7.5-8.5 μ , 6-7-sided, angles often somewhat nodulose. Basidia 32-43 x 10-13 μ , 2-4-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel hyphae 4-10 μ broad. Subhymenium a gelatinous zone. Pileus trama radial. Cuticle a narrow zone of gelatinous hyphae. Pilocystidia none. Clamp connections rare.

This was at first called E. grayanum but the spores are not those of the type of that species.

rhodopolium (Fr.) Kummer
Entoloma ~~gossypium~~ PK.
No. 22109



Pch - x 1000

ENTOLOMA RHODOPOLIUM

New Scotland, Albany Co., Peck, Sept.

Agrees with Romell 14410.

AGARICUS RHODOPOLIUS Fr.

North Elba, Essex Co., Peck, Entoloma.

Spores 8.5-10.5(11) x 7.5-8.5(9) μ . Other characters not determined; material not satisfactory.

ENTOLOMA RHODOPOLIUM

Pittsford, N.Y., F.S. Boughton, Sept. 1911 (Peck Herb.)

Spores 9.5-11(11.5) x 7-8 μ , subglobose to ellipsoid.

Pleurocystidia and cheilocystidia none. Subhymenium gelatinous.

Cuticle only obscurely gelatinous.

This is nearer clypeatum than rhodopolium, because some (several) spores ellipsoid, and cuticle slightly gelatinous. Spores too large for nidorosum.

ENTOLOMA RHODOPOLIUM

Stow, Mass., G.E. Morris, Sept. 1908 (Peck Herb.)

Spores 8-10.5 x 7.5-8.5 μ . Otherwise as Romell 14410.

ENTOLOMA RHODOPOLIUM

North Elba, Essex Co., Peck, Sept. 8, 1910.

Spores and otherwise as in Romell 14410.

ENTOLOMA RHODOPOLIUM

Karner, Peck, Sept.

Spores 8.5-10.5 x 7.5-9 μ . Otherwise as Romell 14410.

ENTOLOMA RHODOPOLIUM

Stow, Mass., S. Davis, Sept. 7, 1911.

Spores and otherwise as in Romell 14410 (U-T 28955).

ENTOLOMA RHODOPOLIUM

Karner, Albany Co., N.Y., Peck, Aug.-Sept.-Oct.

Spores 8.5-11 x 7.5-8.5 μ , (5)6-sided, ellipsoid or ovoid.

Basidia and other characters as in Romell 14410.

ENTOLOMA RHODOPOLIUM

Karner, Albany Co., Peck, Sept.

Same as Romell 14410.

ENTOLOMA RHODOPOLIUM

Floodwood, Peck, Aug.

All characters as in Romell 14410.

ENTOLOMA RHODOPOLIUM

Sandlake, Rensselaer Co., Peck, July.

All characters as in Romell 14410.

ENTOLOMA RHODOPOLIUM

South Ballston, Saratoga Co., Peck, Aug.

All characters as in Romell 14410.

ENTOLOMA RHODOPOLIUM

Fort Ann, Washington Co., N.Y., Peck, Aug. 13

Spores 8-9.5 x 7-8 μ . Otherwise as in Romell 14410.

ENTOLOMA RHODOPOLIUM

West Albany, under pines, Peck, Sept.

(Label also says: "v. subnidōrōsus")

Spores 8.5-11 x 7.5-9 μ ; otherwise as in Romell 14410.

13796

ENTOLOMA RHODOPOLIUM

Cades Cove, in woods, July 12, 1941

Pileus 2-3.5 cm diameter, broadly umbonate, convex, glabrous, subhygrophanous and subviscid, disc "light brownish olive" to "buffy brown," margin paler, even. Flesh thick, white, odor and taste farinaceous.

Lamellae emarginate, close, broad, white then tinged pinkish.

Stipe 3-6 cm long, 7-12 mm thick, white, silky, apex mealy, solid, base curved and attenuated.

Spores 7-9 (10) x 6.5-8 μ , 5-6-sided. Pleurocystidia and cheilocystidia none. Subhymenium and cuticle slightly gelatinous.

22109

ENTOLOMA RHODOPOLIUM (Fr.) Kummer

Pileus 5-7 cm broad, convex, not wholly expanding, hygrophanous, pale smoky-olive, near "light grayish olive" or "smoke-gray," minutely silky-shining, glabrescent, cuticle separable, zonate, somewhat rugose, margin even and somewhat plicate. Context white, rather thin, pliant; odor and taste farinaceous.

Lamellae emarginate, white then "light pinkish cinnamon", narrow or moderately so, narrowed slightly in front, close, edges fimbriate.

Stipe 7-10 cm long, 10-12 mm thick, white, striate, apex pruinose, elsewhere glabrous, base slightly curved, dry, hollow.

Spores 9-10 x 7-8 μ , ovoid to ellipsoid, 5-6-sided. Basidia 38-46 x 9-11 μ , 2-4-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel, hyphae 5-11 μ broad. Subhymenium slightly gelatinous. Pileus trama radial. Cuticle repent, with more or less scattered to frequent, colorless, more or less repent pilocystidia. Clamp connections and lactifers none.

ENTOLOMA RHODOPOLIUS v. SPHAGNORUM

Karner, Albany Co., Peck, Aug.

Spores (9.5)10-14 x 7.5-9 μ , ellipsoid, 5-6(7)-sided.
Basidia 28-36 x 7-9 μ , 4-spored. Pleurocystidia and
cheilocystidia none. Gill trama subparallel; subhymenium not
distinctive. Pileus trama radial. Cuticle repent, with some
brown hyphae, more or less uplifted, the terminal elements
cystidioid.

This seems closer to strictius than to rhodopolium.

Pileus 8-20 mm broad, convex-conic, finally expanding, gray-brown (not matched), hygrophanous, glabrous, striatulate when moist. Context thin, pallid; odor and taste mild.

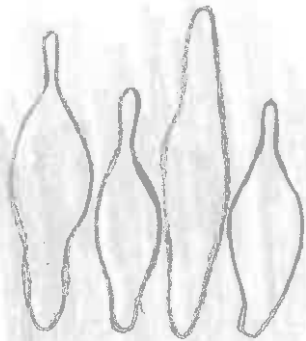
Lamellae adnexed, nearly subdistant to close, broadest in front or middle, whitish then flesh-pink, edges even.

Stipe 3-5 cm long, 1-3 mm thick, brownish, glabrous, apex pruinose, base white-mycelioid.

Spores 8-10 x 6-8 μ , 5-sided, at times obscurely 4-5-6-sided. Basidia 30-37 x 7-10 μ , 2-4-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel, hyphae 5-10 μ broad. Pileus trama radial. Cuticle repent. Clamps and lactifers none.

May be near N. occidentalis, which has an avellaneous and a sordid-avellaneous pileus; N. infula has a prominent papilla, cap nearly maroon color, and stipe apex not pruinose; N. junceus has fuscous gray gills; N. clandestina umbonate, often papillate, gills brown, spores 9-11 x 7; in N. fuscogrisella the gills are narrowed in front, spores 9-13 x 7-8 μ . E. murinum also has a short stipe but is white.

Leptonia tumosa
20456 - Type



Ch - x 1000



Pilo - x 1000

rosea Longyear

LEPTONIA No. 12173

Pileus 1.5-3 cm. broad, dry, convex, umbilicate, "bister" when young, rosy-brown at maturity (color not matched), squamulose, densely so at first, finally the disk densely squamulose, elsewhere scattered squamulose, margin even. Context white, thin; odor fragrant; taste none.

Lamellae adnate, white at first, finally "vinaceous pink," rather broad, close, edges concolorous, minutely fimbriate.

Stipe 6-10 cm. x 2-3 mm., equal, base slightly enlarged and white-mycelioid, concolor to pileus, glabrous below, scurfy at apex, dry, hollow.

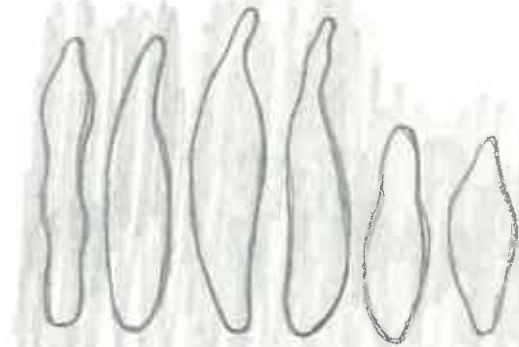
Spores 9-11 x 6.3-7.5 μ , 5-6-sided, at times indistinctly 6-sided, symmetrical. Basidia 26-35 x 7-10 μ , 2-4-spored. Pleurocystidia none; cheilocystidia more or less fusoid to ventricose or bottle-shaped, 25-42 x 7-10 μ . Subhymenium not distinctly differentiated. Gill trama subparallel. Pileus trama radial. Clamps and lactifers none. Cuticle of repent hyphae, the scales composed of tufts of pilocystidia.

Habitat and Distribution. - On decayed log, Tennessee, July.

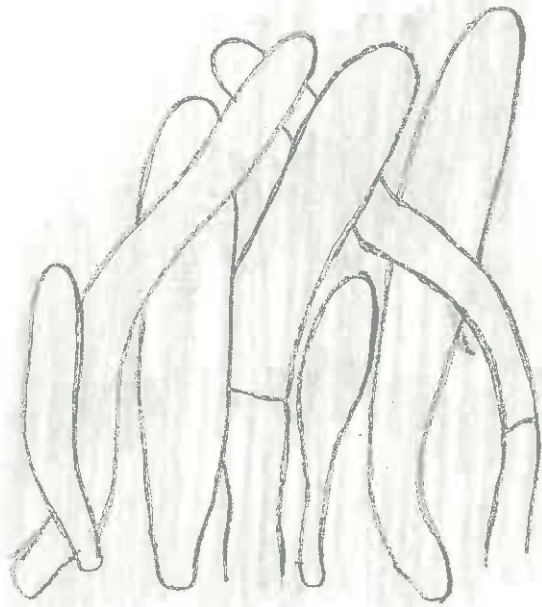
Discussion. - Cf. L. rosea Longyear, ~~L. Farlei Murri~~
~~L. umbilicata Murri~~ Smith says the cheilocystidia in L. rosea
are filamentous, 40-80 x 3-5 (6) μ . Related to griseorubella which
has larger spores.

Cf. Sm-32906 (no. 207)

Leptonia 12173
rosea Longyear



Ch.



Cuticle - $\times 1000$



12173 - *Leptonia rosea* Senguen

LEPTONIA ROSEA Longyear

Orton No. 1274, from Royal Bot. Garden, Edinburgh, coll. W. G. Bramley, Sept. 23, 1957, det. by Orton.

Spores 9-11 x 6-8 μ , 6-sided, more rarely obscurely 6-7-sided. Basidia 32-37 x 8-10 μ , 2-4-spored. Pleurocystidia none; cheilocystidia 26-52 x 6-10 μ , cylindric, clavate, or more or less fusoid. Gill trama subparallel, hyphae 6-15 μ broad. Pileus trama radial. Cuticle of repent hyphae, bearing tufts of erect hyphae, and, on the disc, tufts of colorless to pale brownish, clavate pilocystidia. Clamp connections none.

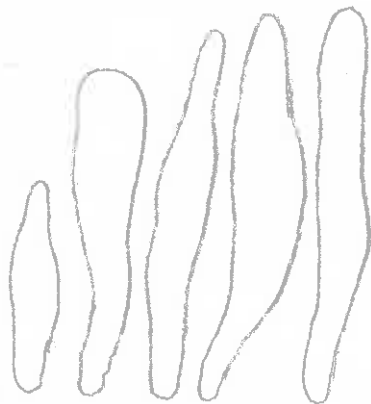
LEPTONIA ROSEA Longyear

Orton No. 1274, from Royal Bot. Garden, Edinburgh, coll. W. G. Bramley, Sept. 23, 1957, det. by Orton.

Spores 9-11 x 6-8 μ , 6-sided, more rarely obscurely 6-7-sided. Basidia 32-37 x 8-10 μ , 2-4-spored. Pleurocystidia none; cheilocystidia 26-52 x 6-10 μ , cylindric, clavate, or more or less fusoid. Gill trama subparallel, hyphae 6-15 μ broad. Pileus trama radial. Cuticle of repent hyphae, bearing tufts of erect hyphae, and, on the disc, tufts of colorless to pale brownish, clavate pilocystidia. Clamp connections none.

Leptomia rosea Fungyar

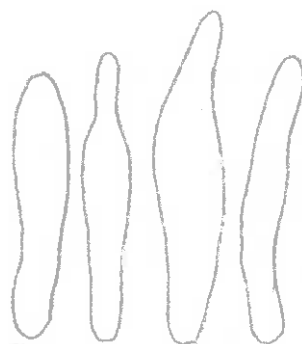
Orton No. 1274



Ch - x 1000

Leptonia rosea

No. 7793



Ch - x 1000



Cuticle (scale) - x 1000

LEPTONIA ROSEIBRUNNEA (Murr.) Murr.

Mycologia 9:180. 1917

Leptoniella roseibrunnea Murr., North Amer. Flora 10:88. 1917.

Pileus 1 cm broad, convex-umbilicate, hygrophanous, uniformly rosy-brown, margin striate. Context rather thick.

Lamellae adnate, salmon-colored, very broad, distant, inserted, edges entire.

Stipe 4 cm x 1 mm, brown, glabrous, equal.

Spores 7.5-9 (10) x 5-5.5 (6) μ , 6-sided, at times indistinctly 5- or 7-sided. Basidia 19-26 x 7-9 μ , 2-spored, (no 4-spored found). Pleurocystidia and cheilocystidia none. Gill trama subparallel. Pileus trama radial. Cuticle of repent hyphae, with scattered groups of repent, septate pilocystidia. Clamp connections rare on the pilocystidia. Lactifers none.

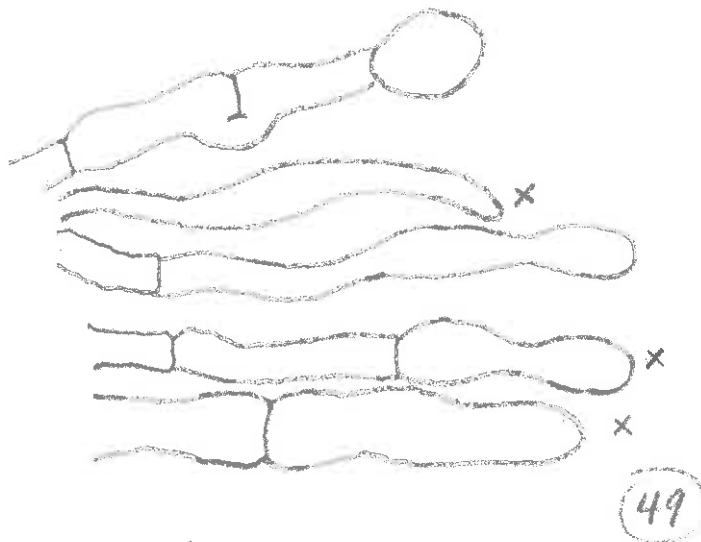
Habit, Habitat, and Distribution - On soil, in hemlock, woods, New York, August.

Material Studied - NEW YORK: Murrill, type (NY), from hemlock woods at the New York Botanical Garden, Aug. 28, 1911.

Observations - The description of the microscopic characters is based on a study of the type. This species is colored somewhat as in L. rosea, but in the latter the pileus margin even, the odor fragrant, the lamellae close, the stipe enlarged downward, the spores larger and cheilocystidia present.

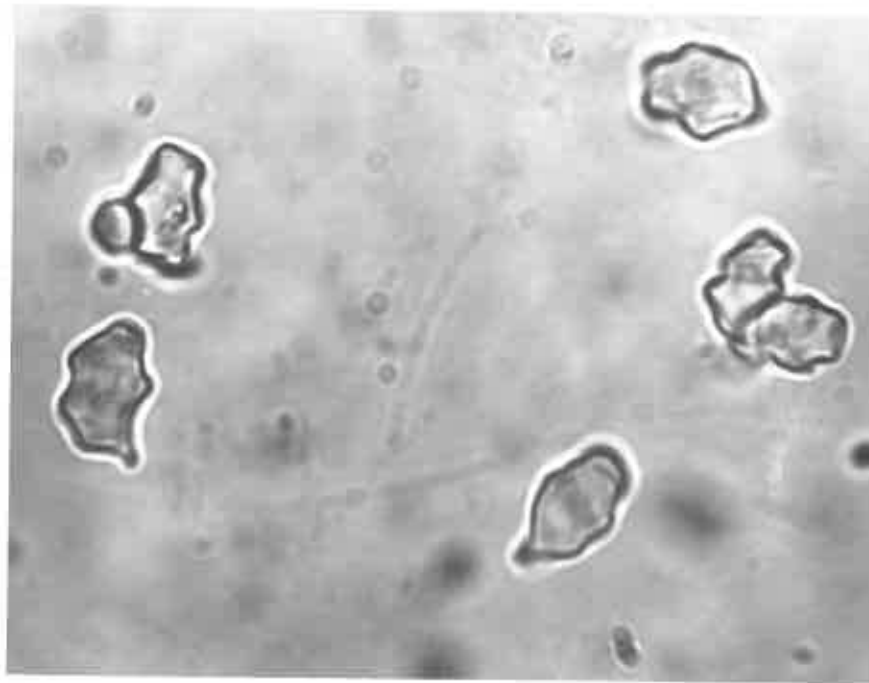
Leptonia roseibrunnea (Murr.)

Type



Cuticle — x 1000

(pilocystidia ± repeat)



36
Leptonia roseibrunnea (Murr.) Murr. - Type

LEPTONIA ROSEOALBOCITRINA (Atk.) comb. nov.

Eccilia roseoalbocitrina Atk., Ann. Myc. 7:369. 1909.

Pileus 1-2.5 cm broad, at first strongly convex, slightly depressed, then expanded and the margin strongly upturned, minutely silky, entirely white, at times faintly tinged yellow on the disc. Context thin.

Lamellae adnate-decurrent, in some merely adnate, pale, flesh color, subdistant or moderately close, broad, slightly ventricose.

Stipe 4-6 cm x 2-3.5 mm, at first with a delicate white velvety tomentum, in age the apex mealy with tufts of clavate cells, hollow, cartilaginous.

Spores 9-13 x 6-9 μ , 5-7-sided, at times obscurely so. Basidia 28-35 x 9-12 μ , 2-4-spored. Pleurocystidia none; cheilocystidia 40-72 x 5-12 μ , somewhat versiform (clavate, fusoid, bottle-shaped, cylindric), often with a tapering neck, absent in many sections. Gill trama subparallel, hyphae 7-12 μ broad. Pileus trama radial, appearing as pseudoparenchyma in tangential sections. Cuticle repent with a rather dense trichodermium, the terminal elements as colorless, clavate to cylindric pilocystidia. Clamp connections and lactifers none.

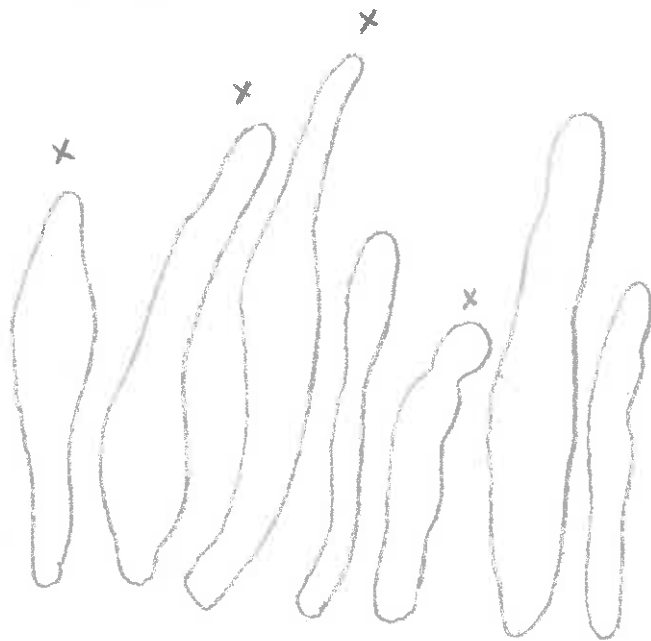
Habit, Habitat, and Distribution - On soil, New York, October.

Material Studied - NEW YORK: Atkinson Nos. 20096 and 20096a (CUP; type not indicated), from the head of Cayuga Lake, Ithaca, collected by Lawrence, October 16, 1906.

Observations - No. 20096 is listed first in Atkinson's publication, and may be the type. The colors and the large cheilocystidia are distinctive. This species is related to L. sericella which has pleurocystidia, and to L. flavida, both of which have smaller spores.

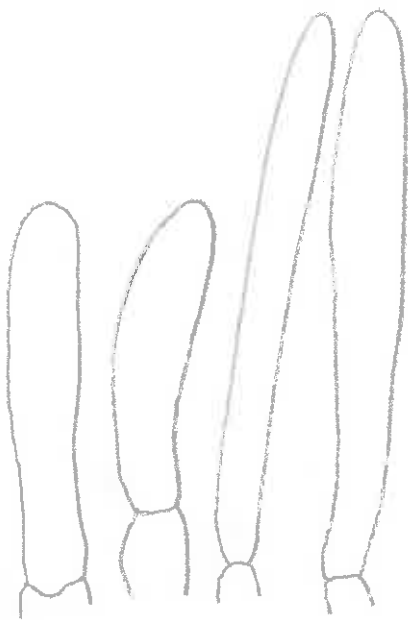
Ecilia roseoalbostrina Atk.

Atkins No. 20096



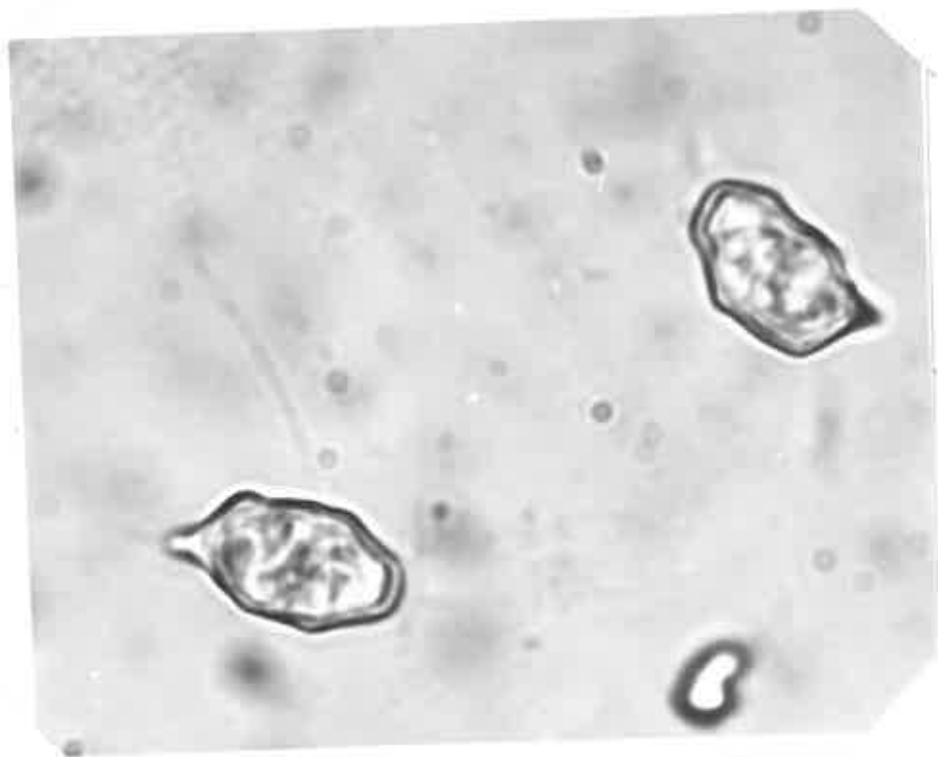
Ch - x 1000

(50)



(51)

Pilocyptidia - x 1000



Eccilia roseoalbocitrina Atk. - Type

x 2500

23483

ENTOLOMA RUBRIBRUNNEUM Murr.

Pileus 5-8 cm broad, expanded-depressed, hygrophanous, "snuff brown" (wet), paler when dry, glabrous, minutely striatulate. Context white, thin, fragile; odor and taste farinaceous.

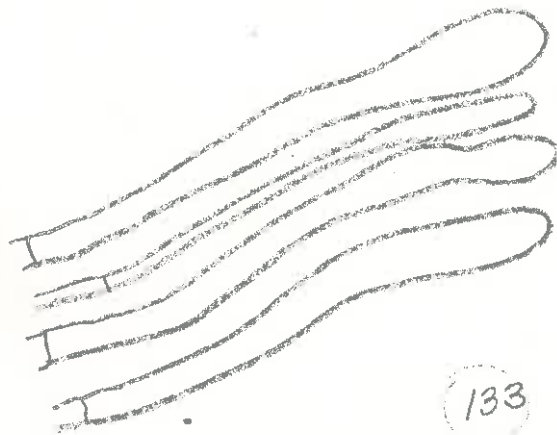
Lamellae emarginate, whitish then "light pinkish cinnamon," close to nearly subdistant, broad, many short, edges rough.

Stipe 7-10 cm x 7-9 mm, whitish, somewhat fibrillose, apex pruinose-mealy, hollow, base slightly bulbous.

Spores 8-10 x 7-8 μ , 5-sided, ovoid to ellipsoid, some subglobose. Basidia 40-48 x 10-12 μ , 2-4-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel, hyphae 4-7 μ broad. Subhymenium gelatinous. Pileus trama radial. Cuticle repent, dry. Clamps and lactifers none. Pilocystidia scattered, cylindric-clavate.

Eutoloma rubribrunneum Murr.

Type



133

Pilo - x 1000

19348

ENTOLOMA RUGULOSUM sp. nov.

(Same as Nos. 9076, 14416, 7946)

Pileus 3-6 cm broad, convex, expanded-convex, obtusely umbonate, grayish-olive to smoky gray (not matched), not viscid, hygrophanous, silky-shining, radiately rugulose, margin even, spuriously striatulate when wet. Context white, firm, medium thick; odor and taste farinaceous.

Lamellae emarginate, ashy-white then "light pinkish cinnamon," crowded, medium broad, narrowed in front, edges rough.

Stipe 5-8 cm long, 5-9 mm thick, concolorous, base white, mealy above, elsewhere striate, dry, equal, stuffed.

Spores 9-12 x 6.5-8 μ , 5-6-sided, color in deposit: "onion skin pink." Basidia 37-45 x 10-12 μ , 2-4-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel, hyphae 4-10 μ broad. Subhymenium slightly gelatinous. Pileus trama radial. Cuticle a non-gelatinous zone of slender (3-6 μ) repent hyphae, the subcuticular hyphae broader (10-16 μ). Pilocystidia, clamps, and lactifers none.

OBSERVATIONS - Smith has written it (19348) up (May, 1956). Near lividum or cokeri, but cokeri is viscid, and has spores 7.5-9 x 7-8 μ , near grayanum which has globose or subglobose spores; sinuatum is viscid, yellowish white and has slightly shorter spores. Not commune which has smaller spores; griseum has smaller spores. E. murinum not rugose, gills white, smaller

cap and stipe, smaller basidia (26-32 x 10-12 μ).

The radiate-rugulose pileus suggests *E. cokeri* but it is not that (it is viscid and has smaller spores). Perhaps nearest to *E. lividum*, but Lange and Ricken think it is the same as *sinuatum* (but not according to Fries).

E. majalis (Fr.) Lange is distinctly umbonate, date-brown (dingy gray and pale when dry), spores 8-10 x 7-8 μ . Moser calls *majalis* *R. aprilis* f. *majalis*, which K. & R. say is viscid, deep dusky brown, spores 9.2-12 x 7.5-10 μ (Lange 74B).

Near *R. clypeatus* (which Bas says that Romagnesi admitted grades into *aprilis*), which has spores 8.5-10.5 x 7-8.5, 5-sided (Bas collection, U.T.-23875, is gray and does not resemble 19348).

LEPTONIA RUSTICOIDES (Gill.)

(Bas-1668; Tenn.-26255)

Notes by Bas

Cap 8-18 mm, umbilicate convex at first, becoming shallow infundibuliform with narrow bent down margin, hygrophanous, moist: dark brown, margin up to half-way to center with pale cafe-au-lait interstriation, shiny, radially fibrillose-by striped; dry: pale sepia-cafe-au-lait, shiny, radially fibrillose; cap becoming very irregular with age. Flesh concolor. Taste farinose.

Gills distant, thick, decurrent, sometimes forked, narrow to broad, rather dark gray-brown with pinkish tinge.

Stem 10-20 x 0.8-1.5 mm, very dark sepia, smooth and glabrous, slightly shiny.

Notes by Hesler

Spores 8-10 x 7-8.5 μ , 6-sided, subglobose or ovoid. Basidia 27-32 x 9-11 μ , 2-4-spored. Pleurocystidia and cheilocystidia none. Cuticle of repent hyphae, the disc with clusters (tufts) of fuscous, clavate pilocystidia (scales). Clamp connections none.

Cf. L. infundibuliformis sp. nov., which is dark gray when young, paler gray at maturity, gills subdistant, spores ovoid to ellipsoid, 5-sided, or at times 4-sided, pilocystidia none.

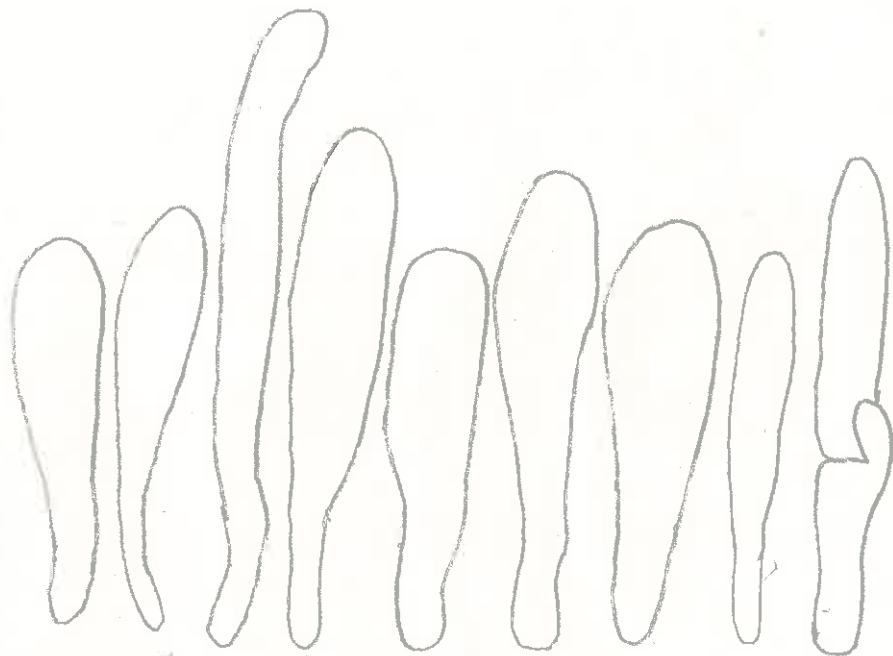
ENTOLOMA SALMONEUM Pk.

Type

Spores 11-14 x 9-11 μ , quadrate, more rarely obscurely 5-sided, at times the angles slightly nodulose. Basidia 37-56 x 11-15 μ , 2-4-spored. Pleurocystidia none; cheilocystidia 51-83 x 7-15 μ , the longer ones tramal, clavate. Gill trama subparallel, hyphae 5-8 μ broad. Pileus trama radial. Cuticle repent, an occasional surface hyphae more or less uplifted and the terminal element clavate (cystidioid). Clamp connections rare on the cheilocystidia, none elsewhere. Lactifers in the gill trama.

Entoloma salmonicum PK.

Type



Ch - x 1000
(longer ones "terminal")



Pilo - x 1000



5352 - *Eutoloma salmoneum* PK.

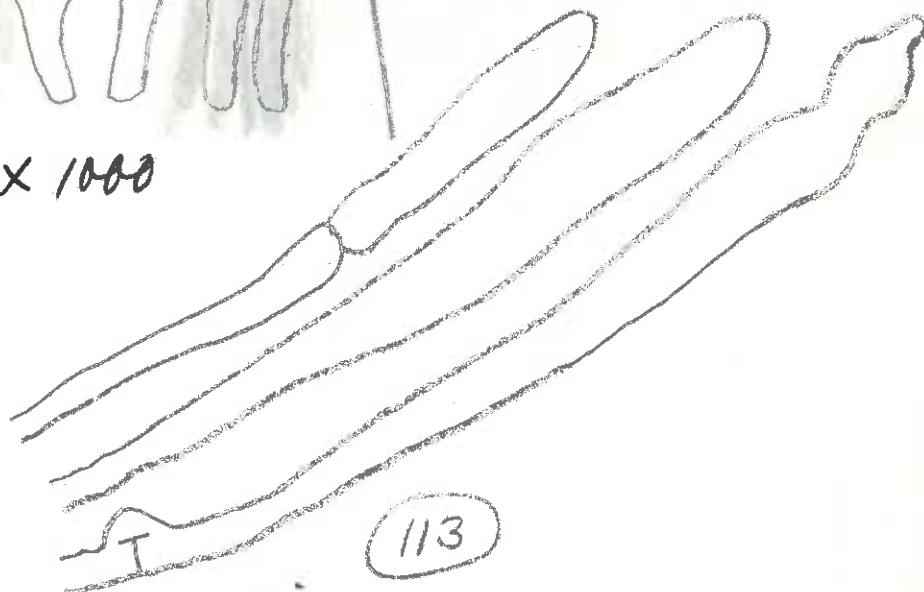
Nolanea palmonea (PK.)

No. 21870



Ch. - x 1000 (112)

Caulo - x 1000



(113)

Pilo - x 1000



21870 - *Eitaboloma palmoneum* Fr.



21870 - *L. salmonens*



22078 - *R. salmoneus*



22078 - *Eutoloma salmoneum* Fr.

29245

RHODOPHYLLUS SALMONEUS

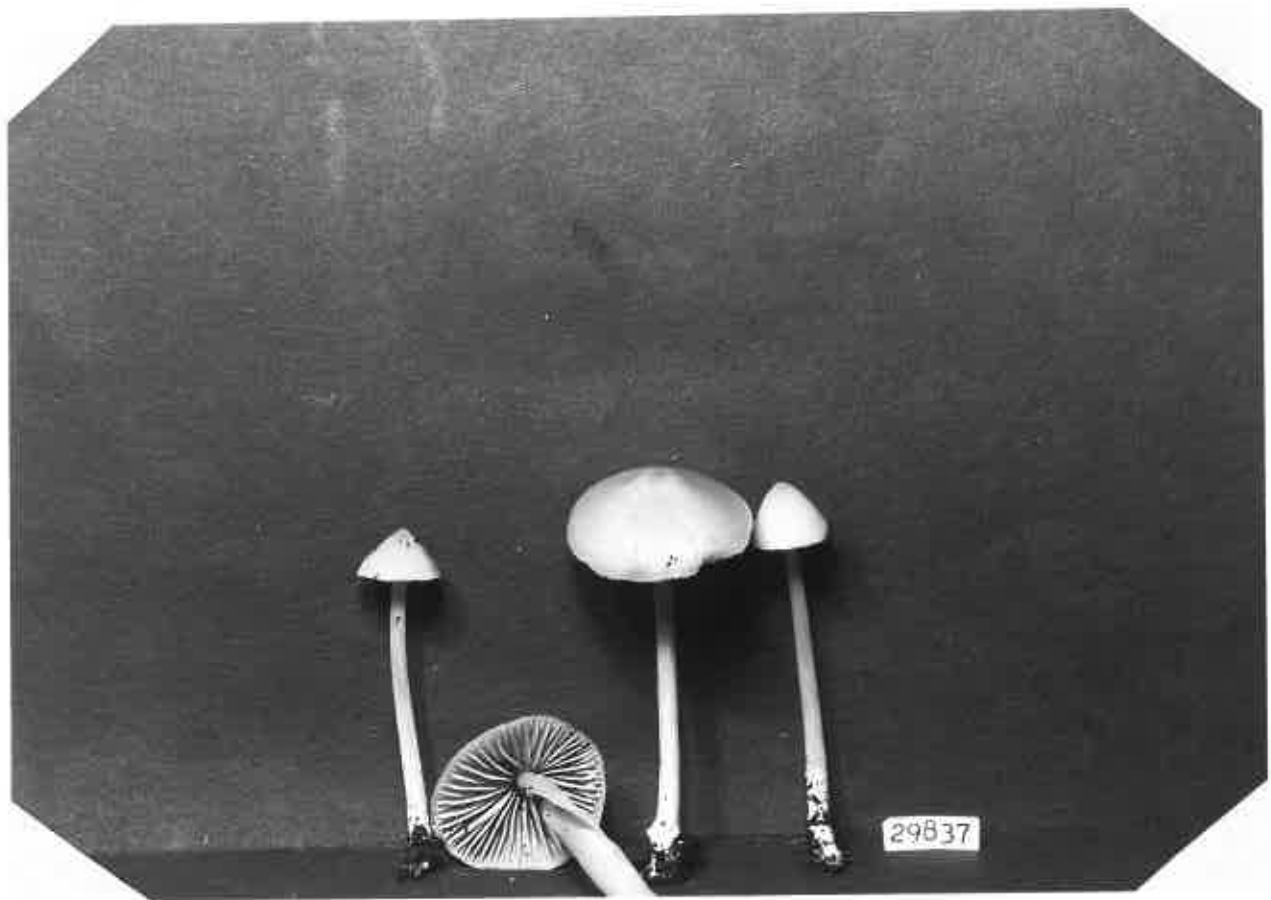
PHOTO-color

Horse Cove, leg. Ron Petersen, Aug. 10, 1966

Pileus 1.5-2.5 cm broad, "salmon orange," umbo paler.

Lamellae "orange rufous."

Stipe 7-10 cm x 2-3 mm, slightly paler, "light salmon orange."



29837 - *Entoloma salmoneum*

LEPTONIA SARCITULA Orton

Type

Orton No. 530, Plodda Falls, Guisachan, Inverness-shire,
Aug. 20, 1955.

Spores 10-13 x 6.5-8 μ , 6-7(8)-sided. Basidia 32-37 x 10-12 μ , 4-spored. Pleurocystidia none; cheilocystidia 27-50 x 7-10 μ , cylindric, clavate, ventricose to subfusoid, at times slightly appendiculate, rare. Gill trama subparallel, hyphae 6-15 μ broad. Pileus trama radial. Cuticle of brown, repent hyphae, bearing some brown, clavate pilocystidia, which are repent, or erect and often in erect tufts, 6-14 μ broad.

On the label, it reads: Leptonia sarcitula Kuhn. & Romagn. ex P. D. Orton.

Description: Trans. Brit. Myc. Soc. 43(2): 301. 1960

LEPTONIA SARCITULA Orton

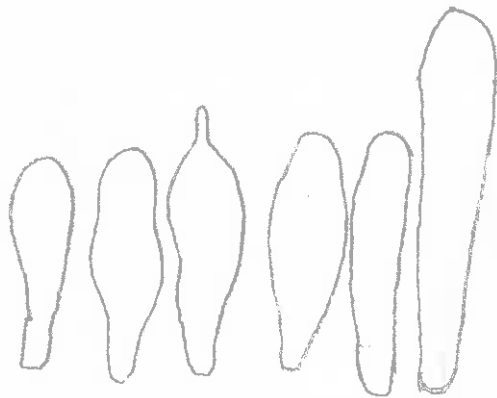
Type

Orton No. 530, Plodda Falls, Guisachan, Inverness-shire,
Aug. 20, 1955.

Spores 10-13 x 6.5-8 μ , 6-7(8)-sided. Basidia 32-37 x 10-12 μ , 4-spored. Pleurocystidia none; cheilocystidia 27-50 x 7-10 μ , cylindric, clavate, ventricose to subfusoid, at times slightly appendiculate, rare. Gill trama subparallel, hyphae 6-15 μ broad. Pileus trama radial. Cuticle of brown, repent hyphae, bearing some brown, clavate pilocystidia, which are repent, or erect and often in erect tufts, 6-14 μ broad.

On the label, it reads: Leptonia sarcitula Kuhn. & Romagn. ex P. D. Orton.

Leptonia sarcitula Orton
Type



Ch - x 1000

LEPTONIA SARCITULA Orton

Orton No. 260

from Royal Bot. Garden, Edinburgh, coll. P. D. Orton, near Kinlochrannoch, Perthshire, Aug. 28, 1954.

Spores 10-13 x 6.5-8 μ , 6-sided, at times obscurely 6-8-sided. Basidia 30-38 x 9-11 μ , 4-spored. Pleurocystidia none; cheilocystidia 30-44 x 8-12 μ , clavate, subcylindric, or more or less fusoid. Gill trama subparallel, hyphae 6-15 μ broad. Pileus trama radial. Cuticle of repent hyphae, bearing brownish, clavate pilocystidia. Clamp connections none.

LEPTONIA SARCITULA Orton

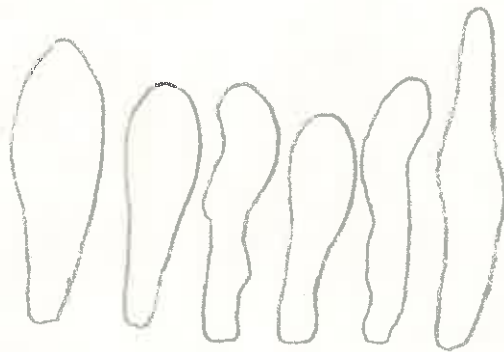
Orton No. 260

from Royal Bot. Garden, Edinburgh, coll. P. D. Orton, near Kinlochranoch, Perthshire, Aug. 28, 1954.

Spores 10-13 x 6.5-8 μ , 6-sided, at times obscurely 6-8-sided. Basidia 30-38 x 9-11 μ , 4-spored. Pleurocystidia none; cheilocystidia 30-44 x 8-12 μ , clavate, subcylindric, or more or less fusoid. Gill trama subparallel, hyphae 6-15 μ broad. Pileus trama radial. Cuticle of repent hyphae, bearing brownish, clavate pilocystidia. Clamp connections none.

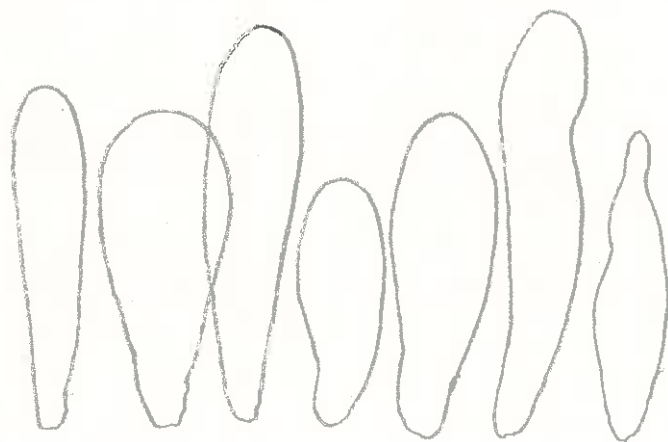
Leptomia parvitula Oriton

Oriton No. 260



Ch. - x 1000

Leptonia sarcitula Oston
Bas-1512



Ch - X 1000

LEPTONIA SARCITULA (K. & R.) Orton

(Bas-1512; Tenn.-26256)

Notes by Bas

Cap and stem very dark grayish brown, cap appressedly minutely fibrillose to scaly, mostly with small umbilicus, translucently striate when moist. Smell indistinct (not farinose).

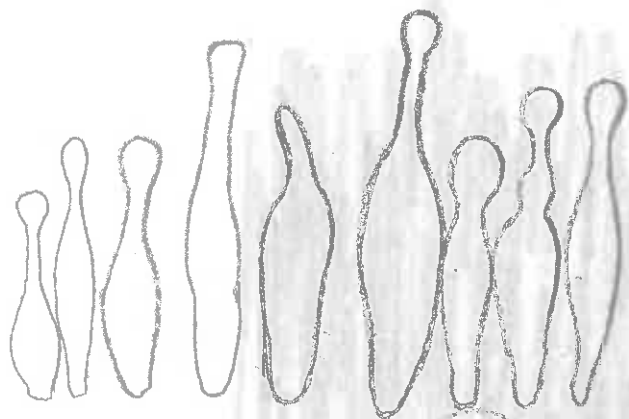
Stem slightly primose at apex.

Notes by Hesler

Spores 11-15 x 7.5-9 μ , 6-7-sided, often subnodulose and obscurely 7-8-sided. Basidia 32-41 x 8-10 μ , (2)4-spored. Pleurocystidia none; cheilocystidia 32-57 x 9-17 μ , clavate, subcylindric, subventricose, scattered. Gill trama subparallel, hyphae 4-8 μ broad. Pileus trama radial. Cuticle of repent hyphae, bearing some fuscous to brown, clavate pilocystidia. Clamp connections none.

Nolanea psabrimella (PK.)

No. 20455

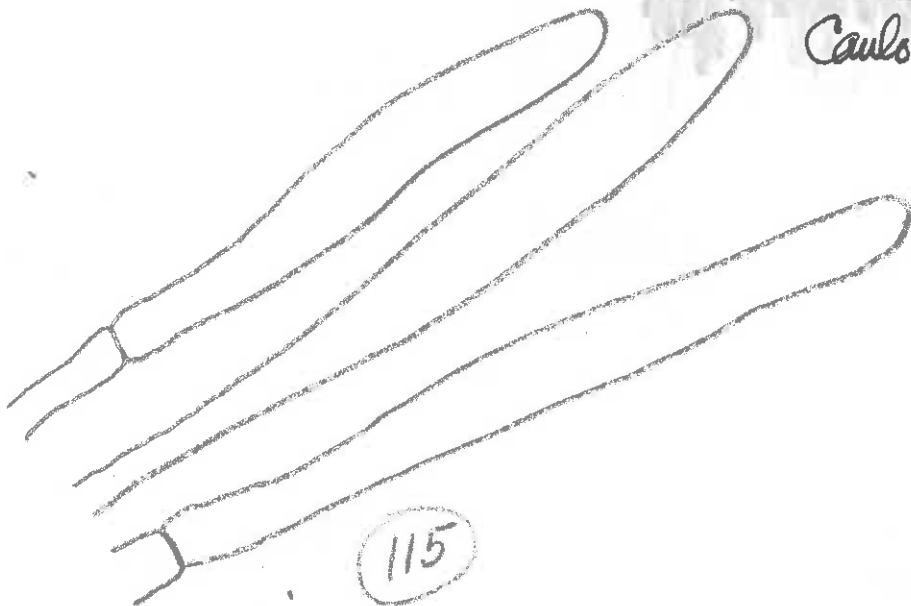


Ch - x 1000

114



Cauls - x 1000



115

Pils - x 1000

ENTOLOMA SCABRINELLUM (Pk.) Sacc.

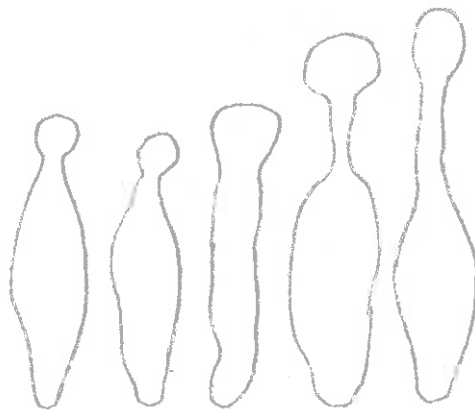
From Wading River, Suffolk Co., N.Y., leg. Peck, Sept.

TYPE

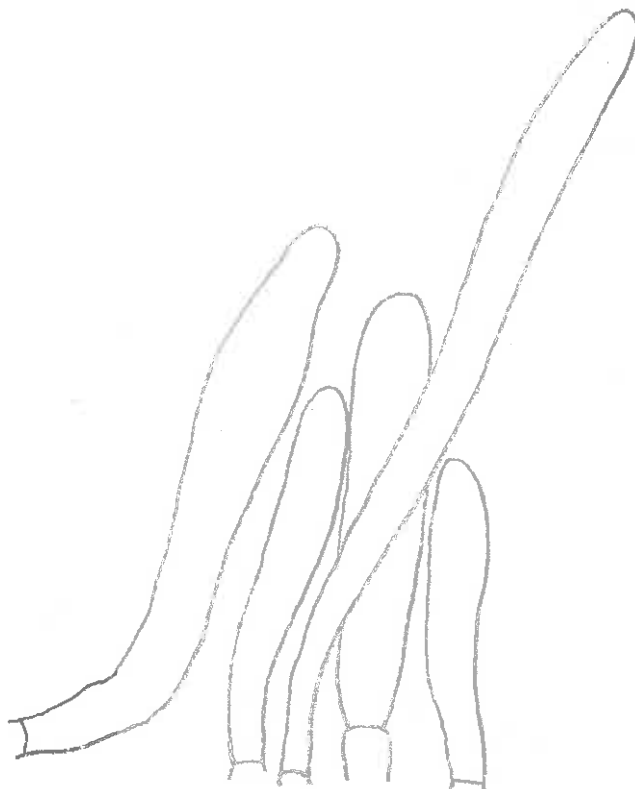
Spores 8.5-10 x 6-7 μ , ellipsoid, rarely ovoid, 6-sided, at times obscurely 5-7-sided. Basidia 28-33(42) x 6-8 μ . 2-4-spored. Pleurocystidia none; cheilocystidia 33-52 x 6-11 μ , fusoid to clavate, often capitate, inconspicuous and difficult to find. Gill trama subparallel, hyphae 6-11 μ broad. Pileus trama radial/
Cuticle subparallel, 6-11 μ broad. Cuticle repent, with frequent tufts of erect, colorless pilocystidia. Clamp connections and lactifers none.

Eutoloma scabrinellum (PK.)

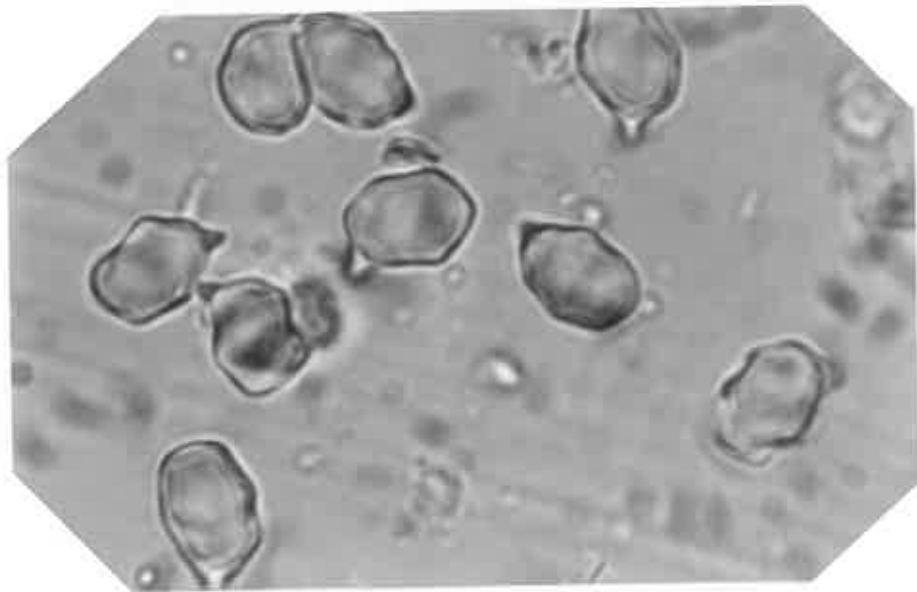
Type



Ch - x 1000



Pals - x 1000



Eutoloma scabrinellum (Pk.) Sacc. - Type

x 1800

Pileus 3-4.5 cm broad, conic-convex, expanding, at times mammiform, more or less acutely umbonate, hygrophanous, "hair brown," umbo scabrous-scaly, elsewhere more or less scaly-glabrescent, striate. Context thin, fragile, watery-brown; odor mild or slight, taste subfarinaceous to sweetish.

Lamellae adnexed-emarginate, seceding, white, finally "drab," ventricose, broad, close, edges nearly even.

Stipe 4-6 cm long, 3-5 mm thick, dingy pallid below, scurfy-mealy at apex, fibrillose-striate, easily splitting, stuffed-hollow, equal or slightly clavate at base.

Spores 8-9 (10) x (5) 6-7 μ , 6-7-sided, often obscurely 5-6-7-sided. Basidia 37-50 x 9-12 μ , 2-4-spored. Pleurocystidia none; cheilocystidia 33-52 x 7-11 μ , flask-shaped, bottle-shaped to clavate, with a neck, often capitate. Gill trama parallel to subparallel, hyphae 5-10 (16) μ broad. Pileus trama radial. Cuticle repent, with fuscous, clavate-cylindric repent to more or less erect pilocystidia, often in loose tufts. Clamp connections none. Lactifers present in pileus and gill trama.

LEPTONIA SCABROSA (Fr.) P, Karst.

from Kew; on chalk grassland, Fetcham Downs, Surrey,
Coll. R. W. G. Dennis, Aug. 10, 1954.

Pileus dingy to pale, blackish; lamellae broad, close,
edges concolorous; stipe dark (as cap).

Spores 10-15 x 6-8 μ , 6-7-sided, angles sharp or often
rounded, then angular-nodulose and somewhat obscurely 6-9-
sided. Basidia 32-42 x 10-12 (15) μ , 4-spored. Pleurocystidia
and cheilocystidia none. Gill trama subparallel, hyphae
5-9 μ broad. Pileus trama radial. Cuticle of repent brownish
hyphae, bearing scattered or clustered, clavate, brown
pilocystidia. Clamp connections none.

In a color illustration (painting) accompanying the
specimens, the cap is dingy brownish, context white, stipe
dull blue-gray.

In K + K, they give characters in their key:—

Cap grey-brown, or horn, or brownish-yellowish-
greyish, not very dark except in umbilicus, 2.5-5 cm
Broad, striate

Lamellae neither blue nor grey, edges concolorous,
and no ch

Stipe bluish-grey, the blue striking in young ones
and can disappear completely with age.

Spores 10-13 x 6.5-7.5 μ . Ch. none. *But identify it from N.Y. (see nat.)*

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In a color illustration (painting) accompanying the
specimens, the cap is dingy brownish, context white, stipe
dull blue-gray.

LEPTONIA SCABROSA (Fr.) P. Karst.

Bidr. Finl. Nat. Folk 32:279. 1879

Agaricus scabrosus Fr., Epicr. Myc., p. 154. 1838.

(Descr. from Ricken, 1915)

Pileus sooty-brown, not striate, hygrophanous, gray when dry, scaly, convex, umbilicate from the first, rather large, 3-5 cm., nearly membranous.

Lamellae gray, nearly distant, horizontal, adnate.

Stipe steel-blue or sooty black, glabrous (polished?), with rough black punctations and white mealy points, nearly equal, 5-8 cm. x 2-3 mm., stuffed-hollow, cartilaginous, firm.

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Bidr. Finl. Nat. Folk 32:279. 1879

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LEPTONIA SEMIGLOBATA (Murr.) Murr.

Mycologia 9:180. 1917

Leptoniella semiglobata Murr., N. A. Flora 10:92. 1917.

Pileus 2-3 cm broad, hemispheric, not expanding, slightly viscid when moist, gray-brown with darker brown squamules, margin incurved, entire.

Lamellae adnate, whitish to salmon-colored, broad, subdistant, edges concolorous.

Stipe 7-8 cm x 2-3 mm, yellowish-gray, much paler than the pileus, glabrous, cartilaginous, equal, hollow.

Spores (9) 10-14 x 7.5-9 μ , 5-7-sided, at times indistinctly 6-7-sided. Basidia 32-38 (48) x 9-11 (15) μ , 2-4-spored. Pleurocystidia and cheilocystidia none. Subhymenium a narrow zone of small cells. Gill trama subparallel. Pileus trama of radial hyphae, appearing as pseudoparenchyma in tangential sections. Cuticle repent, with scattered or tufts of pilocystidia which are repent to uplifted, fuscous in color, forming the darker brown squamules. Clamp connections and lactifers none.

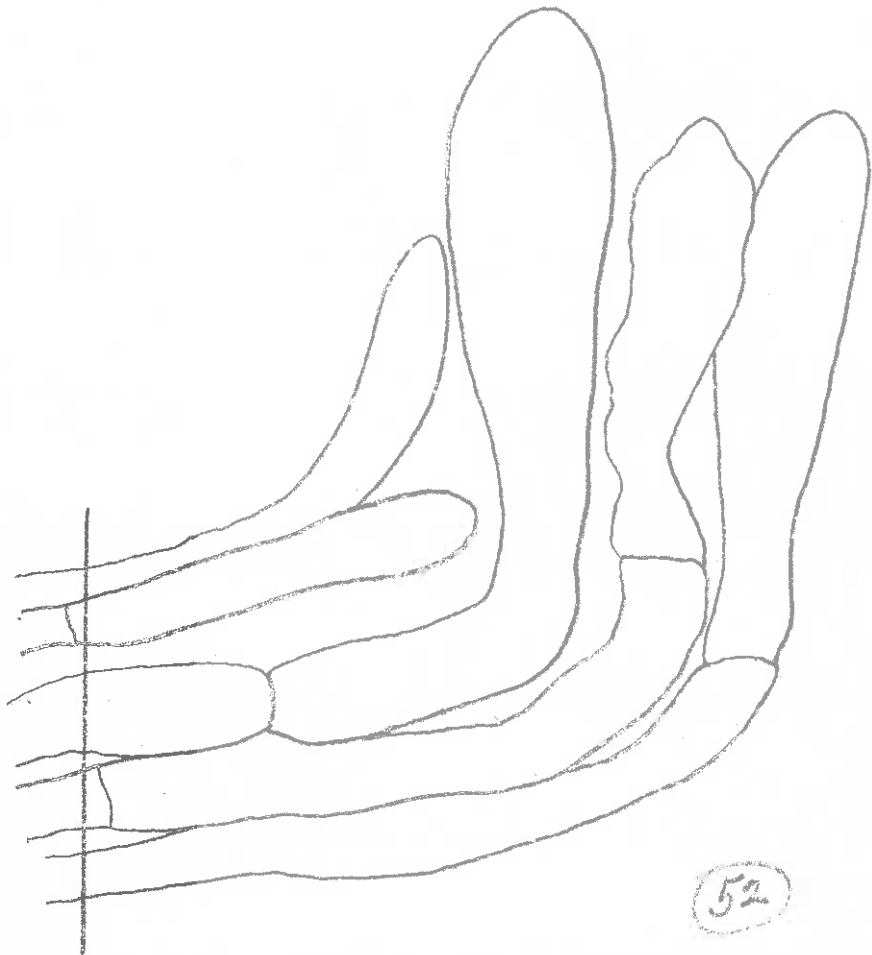
Habit, Habitat, and Distribution - On decayed wood, Maine, August.

Material Studied - MAINE: V. S. White 85, type (NY), from Bar Harbor, Aug. 9, 1901.

Observations - The description of the microscopic characters is based on a study of the type. The spores are larger than described by Murrill.

Leptonia semiglobata (Murr.)

Type



Cuticle ("Squamule") - $\times 1000$
(fuscous-colored filocryptidia)



Leptonia semiglobata (Murr.) Murr. *Type*

All next page

ENTOLOMA SERICATUM Britz.

I. Ex-Herb. Kew. Growing in sphagnum, under birch, leg.
D. A. Reid, Sept. 13, 1957, Invernesshire.
(Reid's notes on label: Cap striate when moist. Smell of
meal. This species caused very severe indigestion even when
fragments were tasted then spit out, therefore probably very toxic.)

Spores 8-10.5 x 7-8 μ , subglobose, (5)6-sided. Basidia
32-38 x 8-10 μ , 2-4-spored. Pleurocystidia and cheilocystidia
none. Gill trama slightly interwoven, hyphae 6-10(15) μ broad.
Subhymenium gelatinous. Pileus trama radial. Cuticle a thin
zone of colorless repent hyphae (not gelatinous) resting on
brown subcuticular hyphae. Clamps none.

II. In birch woods. Isle of (Rhon?). leg. R. W. G. Dennis,
No. 230. Aug. 30, 1952. Ex-Herb. Kew.

Same as I above. On label, Dennis says slight nitrous smell.

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12335

ENTOLOMA SERICATUM Britz.

PHOTO

Pileus 4-10 cm broad, convex to campanulate, expanding plane, slightly or not at all umbonate, hygrophanous, dark-brown when young, then grayish-brown (not matched) when mature and wet, fading to pale buff to whitish when dry, umbo often darker (especially on drying), silky, glabrescent, shining, margin even or rugulose, at times striatulate when wet. Context rather thin, pallid; odor and taste farinaceous.

Lamellae adnexed, then emarginate, narrow, tapering in front, rather close, white then pale flesh, edges even or slightly eroded.

Stipe 5-15 cm long, 8-14 mm thick, shining white, apex pruinose, elsewhere glabrous, equal or tapering below, more rarely tapering upward, often curved at base, hollow.

Spores 9-11 x 6.5-7.5 μ , (5)6(7)-sided, at times obscurely so. Basidia 33-40 x 9-12 μ , 2-4-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel, hyphae 5-10 μ broad. Subhymenium slightly gelatinous. Pileus trama radial. Cuticle repent; pilocystidia none. Clamps none. Lactifers few in the pileus trama.



12335 - *R. sericatus* (Britz.)



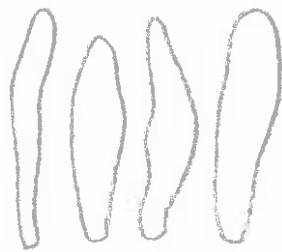
19176 - *Eutoloma sericatum* Britz.

LEPTONIA SERICELLA (Fr.) Barbier

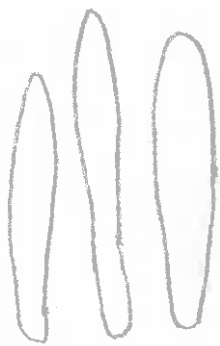
Watling No. 124c, Royal Bot. Garden, Edinburgh, coll. R. Watling, Cannich, Sept. 5, 1957.

Spores 9-12 x 6-7 μ , 6-7-sided, sometimes nodulose and obscurely 6-8-sided. Basidia 28-37 x 7-10 μ , 4-spored. Pleurocystidia none; cheilocystidia 26-34 x 6-8 μ , clavate, subfusoid, few. Gill trama subparallel, 5-8 μ broad. Pileus trama radial. Cuticle repent, with scattered, colorless, more or less fusoid pilocystidia. Clamp connections none.

Leptonia sericella (Fr.) Barbier
Watling No. 124c



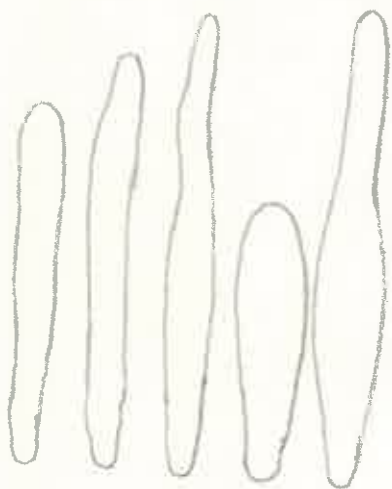
Ch - x 1000



Pilo - x 1000
(colorless)

Leptonia sericeella

Bas - 2303



Ch - x 1000

Seploma

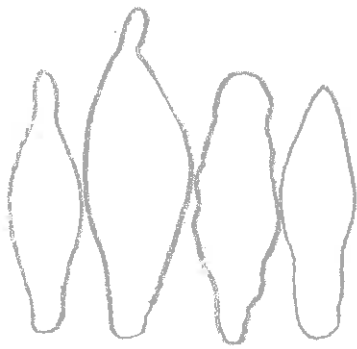
ENTOLOMA SERICELLUM

from Stockholm, leg. L. Romell, Sept. 29, 1911, Femsjö, No. 9572.

Spores 9-11.5(12) x 6.5-7.5(8) μ , 6(7)-sided. Basidia 32-37 x 9-11 μ , 4-spored. Pleurocystidia 32-43 x 10-15 μ , fusoid or ventricose to subcylindric, often more or less mucronate, inconspicuous; cheilocystidia 38-50 x 5-7 μ , fusoid or clavate. Gill trama slightly interwoven, hyphae 4-6 μ broad. Pileus trama radial. Cuticle repent, radial, bearing small or large tufts of erect cystidioid hyphae (scales). Clamps none.

Eutoloma sericellum

leg. Cornell - No. 9572



Sp - x 1000



Ch - x 1000

ENTOLOMA SERICELLUM

Agaricus sericellus

Catskill Mts., C.H. Peck, Entoloma.

Spores 9-12.5 x 7-8.5 μ . Otherwise as in Romell coll.

ENTOLOMA SERICELLUM

from Karner, Albany Co., N.Y., leg. Peck, August

Spores 9-11 x 6-8 μ , 6-sided. Other characters as in
Romell, Stockholm coll.

ENTOLOMA SERICELLUM

from Forge (North Elba), Essex Co., N.Y. leg. Peck, August.

Spores 10-12.5 x 7-8.5(9) μ , (5)6-sided. Otherwise as
in Romell's collection.

ENTOLOMA SERICELLUM

Falmouth, Mass., leg. Simon Davis, July 1906 (Peck Herb.)

Spores 9.5-12 x 6.5-8 μ . Otherwise as in Romell collection.

ENTOLOMA SERICELLUM

Sandlake Mt., N.Y., leg. Peck, August

Spores 8.5-11 x 6.5-7.5 μ . Otherwise as in Romell collection.

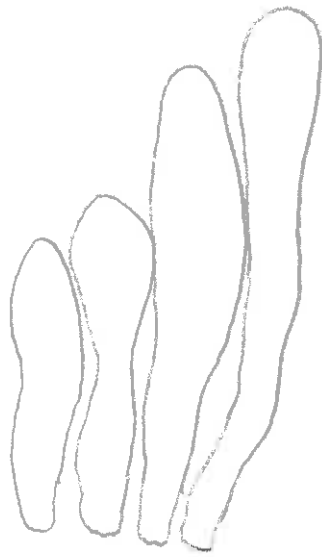
ENTOLOMA SERICELLUM

Gansevoort, Saratoga Co., N.Y., leg. Peck, July.

Spores 9-11.5 x 6.5-7.5(8) μ . Otherwise as in Romell collection.

Rhodophyllus sericellus (Bull. ex Fr.) Quel.

Bas 676 (Term - 29001)



Caulo - x 1000

11561

LEPTONIA SERICELLA

on soil, pine woods, Cades Cove, Aug. 3, 1964

Pileus 1-2.5 cm broad, depressed, white, shining when dry, fibrillose, at times slightly appressed fibrillose-squamulose, even or slightly striate in age. Context thin, white; odor and taste mild.

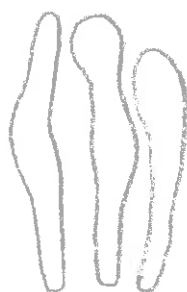
Lamellae adnate-decurrent, white, then flesh-tinted, close, medium broad.

Stipe 3-4 cm x 1-2 mm, white, apex pruinose, \pm compressed.

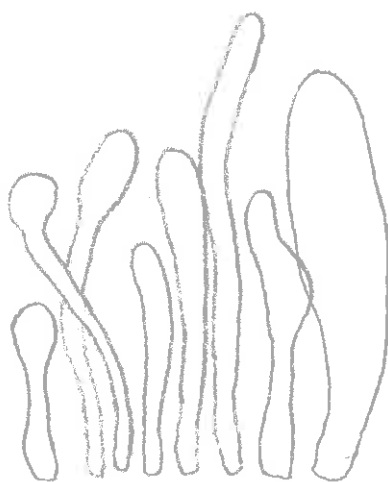
Spores $8.5-12$ x 6-7.5 μ , 5-6-sided, \neq nodulose. Basidia 26-32 x 8-10 μ , 2-4-spored. Pl. ~~none~~ ^{not found?}; ch. 30-36 x 5-7 μ , cylindric-clavate, sometimes subcapitate, or subventricose. Gill trama subparallel, hyphae 4-10 μ , broad. Pileus trama radial. Cuticle ~~a turf~~ ^{repent.} ~~of colorless hyphae~~ ^{present.} Clamp connections ~~none~~. Caulocystidia 30-48 x 3-7 μ , clavate, sometimes subclavate, colorless, forming a thin turf or slight tufts. *Pilocystidia in tufts, colorless, clavate-cylindric.*

Septomia viricella (Fr. ex Fr.) Barbier

No. 11561



Ch. - x 1000



Caulo - x 1000

14262

LEPTONIA SERICELLA (Fr.) Barbier

Pileus 6-20 mm. broad, sub-conic to convex, not expanding, hygrophanous, white with a pinkish tint, at times depressed, appressed silky-fibrillose, shining when dry, margin even (dry), striatulate (wet). Context thin, whitish, odor and taste mild.

Lamellae decurrent, moderately close, white then pinkish-flesh colored, rather broad, ventricose, edges fimbriate.

Stipe 2.5-5 cm. x 1-1.5 mm., white, glabrous, apex pruinose, cartilaginous, equal, dry, hollow.

Spores 9-11 (12) x (6.5) 7-8 μ , 6-7-sided, subnodulose, symmetrical. Pleurocystidia scattered, ventricose, 35-48 x 10-14 μ ; cheilocystidia of two types: (a) clavate, 34-48 x 10-17 μ ; (b) fusiform-bottle-shaped, 45-60 x 7-10 μ .

18028

LEPTONIA SERICELLA (Fr.) ~~Quel.~~

Pileus 6-10 mm. broad, conic-convex, white with a pinkish tint, silky, micaceous, margin even. Context thin, white; odor and taste mild.

Lamellae adnate, white, finally pale pink, edges concolorous, alternately short, subdistant.

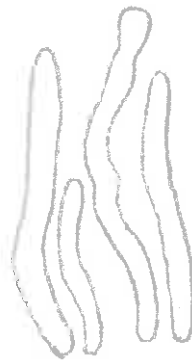
Stipe 18-22 mm. x 1-2 mm., white, silky, cartilaginous, solid, equal.

Spores 9.5-13 x 6.5-8.5 μ , angular, slightly ^{nodulose.} ~~tuberculate.~~
Pleurocystidia "submucronate 40-46 x 10-14 μ , scarcely projecting, rare; cheilocystidia scattered 28-62 x 9-12 μ , fusoid-ventricose to greatly elongated and then subcylindric". Gill trama subparallel (Smith, notes).



20458- *R. sericellus*

Leptoma sericella (Fr) Barbier
~~20458~~



Ch - x 1000

21405 LEPTONIA SERICELLA (Fr. ex Fr.) Barbier

Pileus 1.5-2.0 cm. broad, sub-globose, finally convex-campanulate, ~~apex flat~~ ^{plane} and ~~sub umbilicate~~ ^{depressed,} ~~not~~ ^{fully} expanding, dry, not hygrophanous, white with an ashy tinge, somewhat shining, silky fibrillose-rimulose, with scattered squamulae, margin even. Flesh thin, white; odor fragrant, taste of grass.

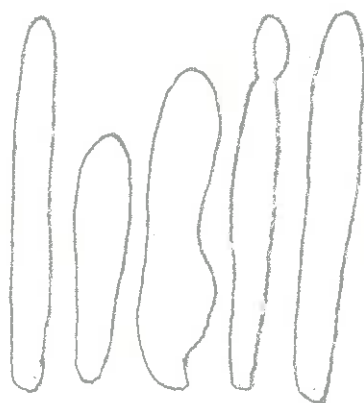
Lamellae adnate with a short decurrent tooth, white at first, finally pale flesh pink, nearly subdistant, many short (short ones of 4 ranks), rather broad, edges concolorous, fimbriate.

Stipe 3-6 cm. x 2-3 mm., white, somewhat silky, base mycelioid, dry, sub-cartilaginous, solid then hollow.

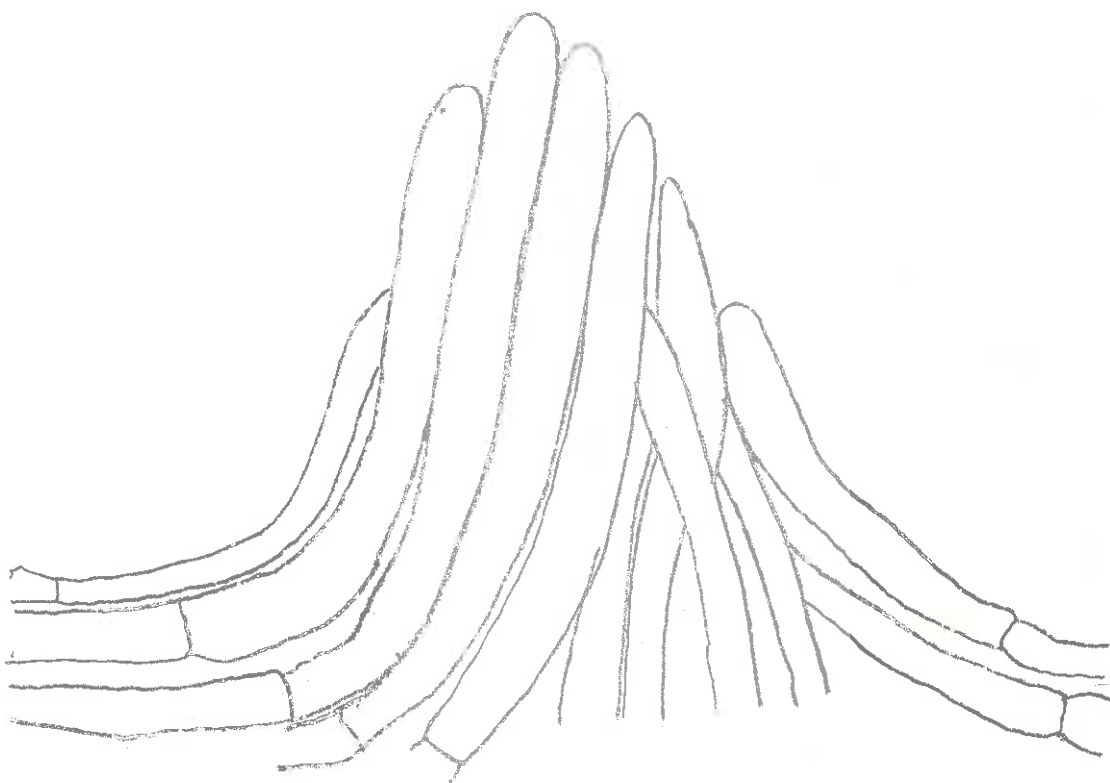
Spores 8-11 x 5.5-7 μ , 5-6-sided. Basidia 34-40 x 7-9 μ , 2-4-spored. Pleurocystidia ~~none~~ ^{not seen}; cheilocystidia clustered, clavate to cylindric, 36-63 x 5-8 μ . Subhymenium a narrow zone of small cells. Gill trama subparallel. Pileus trama radial (as pseudoparenchyma in tangential sections). Cuticle repent, with scattered colorless hyphae loosened and more or less uplifted, at times forming more or less conic tufts, - the terminal elements as more or less clavate pilocystidia. Clamp connections none. Lactifers few.

Septoria ^{*sericella*} ~~*carneo-alba*~~ (Fr.)

No. 21405



ch - $\times 1000$



Cuticle ("leaf", scale) - $\times 1000$

21849 LEPTONIA SERICELLA (Fr. ex Fr.) Barbier

Pileus 10-20 mm. broad, convex, disk flat, white, at maturity with a pink tint (from lamellae), fibrillose-squamulose, shining, not viscid, margin even. Context thin, white, fragile; odor mild, taste slight.

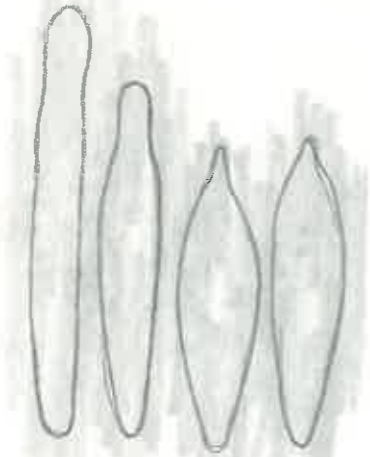
Lamellae adnate with a long-decurrent tooth, subdistant, broad, white becoming "light pinkish cinnamon," edges concolorous, even or slightly fimbriate.

Stipe 5-7 cm. x 1.5-2 mm., white, yellow when dried, becoming brownish in storage, slightly silky, glabrescent, equal or tapering downward, hollow.

Spores 8-10 (11) x (6) 7-8 (9) μ , mostly 6-sided, more rarely 5-sided, sometimes obscurely 6- or 7-sided, symmetrical. Basidia 32-40 x 9-10 μ , 2-4-spored. Pleurocystidia 38-55 x 6-10 μ , cylindric to clavate, ^{or \neq fusoid} apices obtuse or acute-mucronate, few, mostly near the gill-edges; cheilocystidia 38-53 x 6-13 μ , cylindric to clavate, apices obtuse, occasionally acute-mucronate, clustered, conspicuous. Subhymenium greatly reduced to a very narrow zone of small cells. Gill trama subparallel, hyphae 5-12 μ broad. Pileus trama radial. (appearing as pseudoparenchyma in tangential sections). Cuticle repent, but at times with numerous more or less erect clusters of colorless pilocystidia (scales). Clamp connections none. Lactifers abundant in the pileus trama.

Leptonia pericella (Fr.) Barbier
~~var. *deceworens* Sm. (in ed.)~~

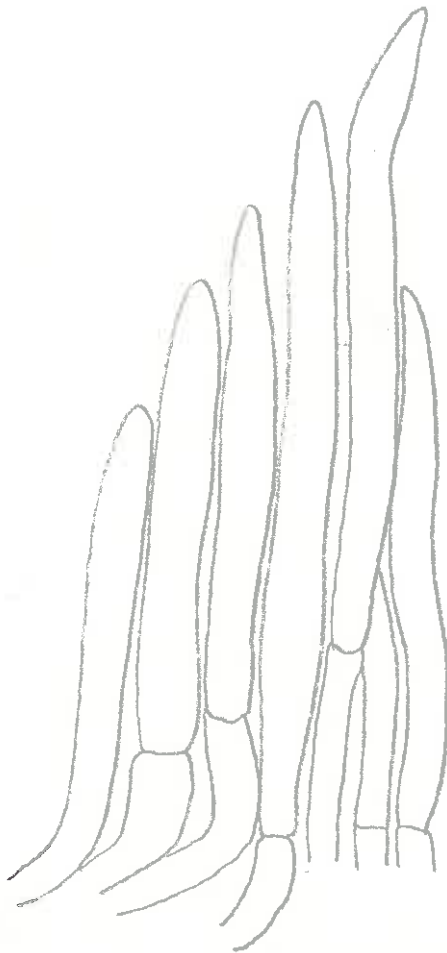
No. 21849



Pl - x 1000



ch - x 1000



Cuticle (scale) - x 1000

22319 LEPTONIA SERICELLA (Fr. ex Fr.) Barbier

Pileus 1-2.5 cm. broad, campanulate or convex to slightly conic, not depressed, hygrophanous, white, tinted pinkish (from lamellae showing through), disk pale yellow, densely silky-fibrillose ^{or scaly,} rimose ^{even.} Context thin, fragile, white; odor mild, taste slightly unpleasant.

Lamellae adnate-decurrent to emarginate-uncinate, nearly close to subdistant, broad, many short, flesh-pink, edges fimbriate.

Stipe 6-8 cm. x 2-3 mm., white, apex slightly pruinose, elsewhere glabrous, hollow, easily splitting, cartilaginous, equal.

Spores 9-12 x 6-7 (8) μ , 5-6-sided, angles ^{nodulose.} ~~moderately~~ prominent, ~~apiculate.~~ ^{not found;} Pleurocystidia ~~none~~, cheilocystidia of 2 types: cylindric, 37-51 x 7-12 μ ; and ventricose, 76-114 x 15-18 μ . ^{Cuticle repent, surface hyphae repent, bearing tufts of colorless, clavate phycystidia (scales).} Caulocystidia in Habitat and Distribution. - In humus, deciduous woods,

Tennessee, July.

tufts, \pm cylindric-clavate, often subcapitate, colorless, 22-55 x 6-12 μ .

22381

RHODOPHYLLUS SERICELLUS

Pileus, gills, and stipe white.

Spores 9-13 x 6-7.5 μ , 6-sided. Pleurocystidia
not seen; cheilocystidia 45-70 x 8-20 μ , clavate-ventricose.

23333 LEPTONIA SERICELLA (Fr. ex Fr.) Barbier

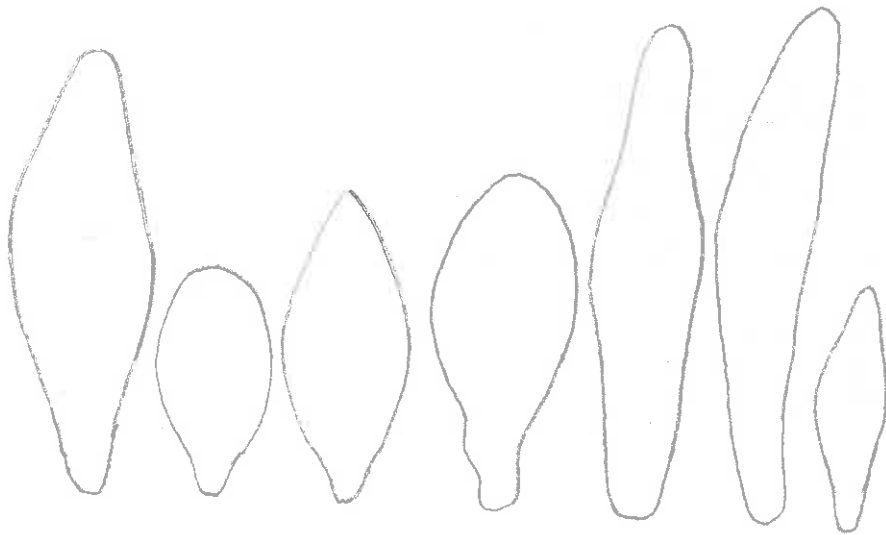
Pileus 7-14 mm. broad, convex, at times umbilicate-depressed, white, at maturity with a pinkish tint (from the gills showing through), glabrous, dry, margin faintly striate. Context white, thin; odor and taste mild.

Lamellae adnate to short-decurrent, white then flesh-pink, subdistant, rather broad, edges white.

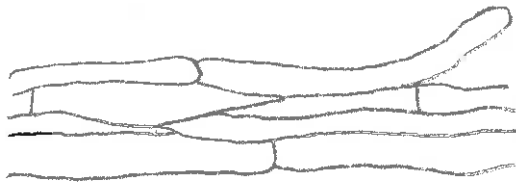
Stipe 4-7 cm. x 0.5-1.3 mm., white, glabrous, equal.

Spores 8.5-11 x 6-7.5 μ , 5-6 (mostly 6-, rarely 7-)-sided. Pleurocystidia none; cheilocystidia 30-78 x 10-20 μ , variable in form: clavate, fusoid, bottle-shaped, vesiculose, apices obtuse, or more rarely slightly appendiculate. Basidia 25-32 x 7.5-10 μ , 2- and 4-spored. Subhymenium of small, compressed cells. Gill trama of subparallel hyphae. Pileus trama of radial hyphae. Cuticle of repent, rather broad hyphae. Lactifers occasional in the pileus trama. Clamp connections none.

Septoria ~~23333~~
~~carnio-alba~~
serucilla

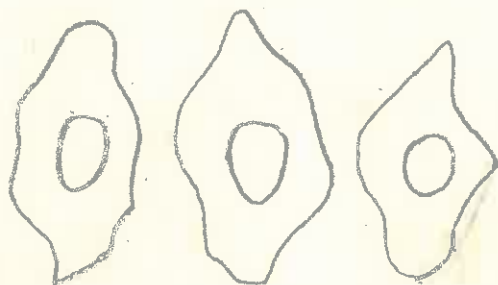


Ch. x 1000

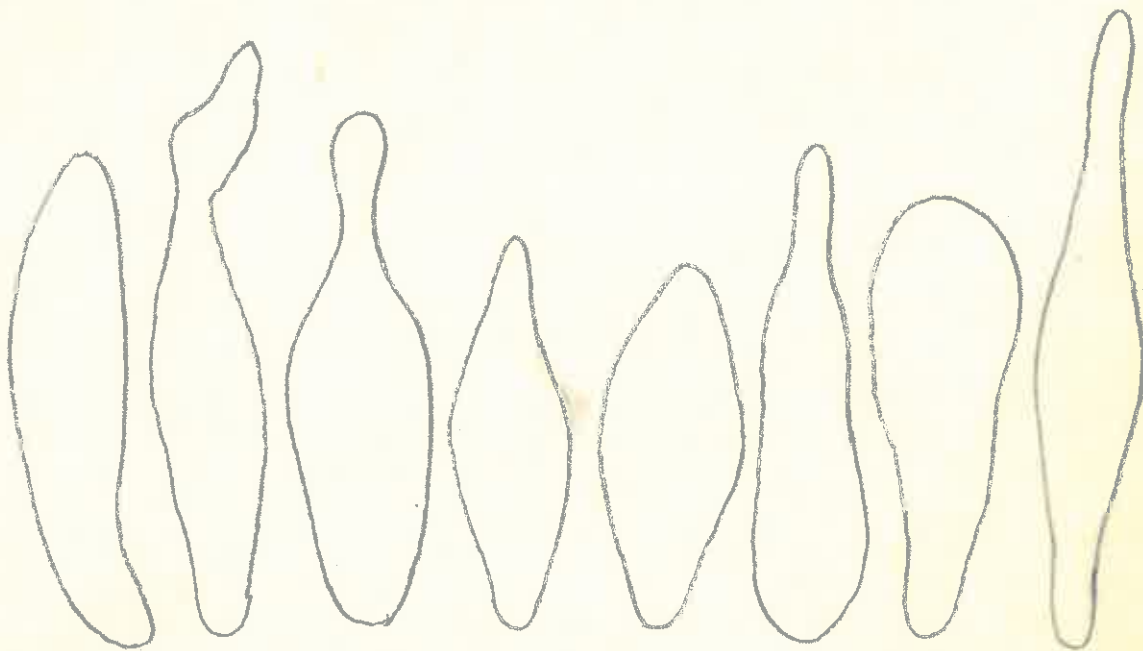


Cuticle - x 1000

Septoria *sericella*
~~23333~~
~~carnes alba~~



Spores x 3000



Ch. x 1000

24388

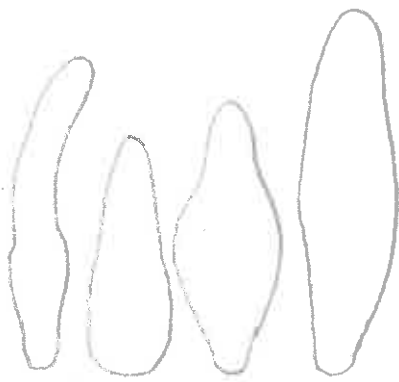
LEPTONIA SERICELLA (Fr. ex Fr.) Barbier

Pileus 5-8 mm. broad, convex, expanding, slightly depressed, white, silky-fibrillose, disk scaly, even or faintly striate. Context very thin, white; odor and taste mild.

Lamellae white, finally pinkish, medium broad, nearly subdistant, edges concolorous.

Stipe 9-11 x 6-7.5 μ , 5- (rarely 6-) sided, symmetrical. Basidia 25-36 x 10-12 μ , 2- and 4-spored. Pleurocystidia none; cheilocystidia 30-48 x 5-14 μ , subcylindric, subulate, bottle-shaped, or ventricose. Subhymenium a narrow zone of flat cells. Gill trama subparallel. Pileus trama of radial hyphae (pseudo-parenchyma in tangential sections). Clamp connections none. Lactifers occasional. Cuticle of repent hyphae.

Septoria ^{*carneo-albus*}
~~24388~~
sericea



Ch - x 1000

sericella (Fr.) Barbier
LEPTONIA No. 25771

Pileus 6-12 mm broad, plano-convex, depressed, white, minutely more or less appressed-fibrillose, margin incurved, even. Context white; odor mild, taste slightly astringent.

Lamellae adnate with a decurrent tooth, close, broad, white, finally pale pinkish, edges fimbriate, concolorous.

Stipe 18-26 mm x 0.6-1.5 mm, whitish, silky above, base white-mycelioid.

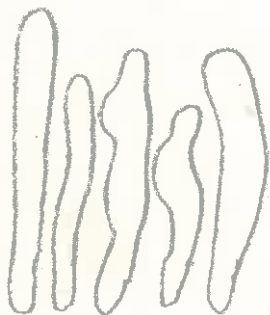
(in our herbarium specimens the ~~color~~ ^{stipe} becomes reddish-brown)

Spores 9-11 x 5.5-7 μ , 5-6-sided. Basidia 26-29 x 8-10 μ , 2-4-spored. Pleurocystidia none; cheilocystidia 26-40 x 3-6 μ , cylindric to slightly irregularly-shaped. Gill trama sub-parallel, hyphae 5-8 μ broad. Pileus trama cellular in tangential sections. Cuticle of repent hyphae, bearing a tangled turf of colorless hyphae, 5-9 μ broad. Clamp connections none.

On soil, under hemlock, Cades Cove, July 27, 1963.

Near sericella which has pol (few, + near gill-edges)

Leptonia No. 25771
= R. sericellus



Ch - x 1000

26252

LEPTONIA SERICELLA (Fr.) Barbier

(Bas-2303; Tenn. ²⁶²⁵²~~26257~~)

Notes by Bas

Cap 7-12 mm, white, later on with yellowish center, minutely white fibrillose felted. Smell when crushed rancid (distinctly so; not farinose).

Gills white at first, then becoming pink, broadly adnate--slightly emarginate.

Stem 20-35 x 1-1.5 mm, white, later on glossy dingy white; primose at apex.

Notes by Hesler

Spores 9-12 x 7-8.5 μ , (5)6-sided. Basidia 28-37 x 8-11 μ , 4-spored. Pleurocystidia none; cheilocystidia 35-63 x 5-10 μ , cylindric, bottle-shaped, subclavate. Cuticle bearing clavate, colorless pilocystidia. Clamp connections none (Bas found them at the base of the basidia).

26472 LEPTONIA SERICELLA (Fr. ex Fr.) Barbier

On soil, pine woods, Cades Cove, Aug. 20, 1964

Pileus 8-12 mm broad, white, fibrillose, disc slightly depressed. Odor and taste mild.

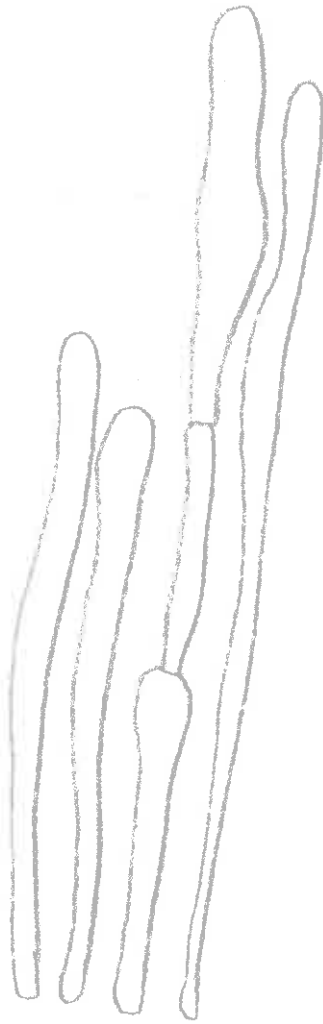
Lamellae white then pink, subdistant, ~~divaricate~~, medium broad, edges serrate.

Stipe 1.5-3 cm x 1.5-2.5 mm, white, white mealy at apex, silky below.

Spores 8.5-10 x 6-7(7.5) μ , 5-6-sided. Basidia 27-38 x 8-10 μ , 2-4-spored. Pleurocystidia none; cheilocystidia tramal, 35-68 x 3-5 μ , cylindric to filamentous. Gill trama subparallel, 4-7 μ , broad. Pileus trama radial. Cuticle fibrillose. Clamps none. Caulocystidia 55-125 x 5-10 μ , densely gregarious or scattered or in tufts, cylindric to filamentous.

Leptonia sericella

No. 26472



Caul - x 1000

28163

LEPTONIA SERICELLA (Fr. ex Fr.) Barbier

OK

Cades Cove, on soil, Aug. 27, 1965

Pileus white, margin becoming slightly pinkish, subhygrophanous. Lamellae and stipe white.

Spores 10-12.5 x 6-7(8) μ , 6-8-sided. Basidia 25-31 x 7-8 μ , 4-spored. Pl. none; Ch. cylindric or subcylindric to ventricose. Cuticle fibrillose. Caulocystidia none.

29001 RHODOPHYLLUS SERICELLUS (Fr. ex Fr.) Qué1.

Netherlands, prov. Drente, Steenwijk, 24 IX 1960.

Among mosses and grasses along track in Larix-plantation.

Description by R. A. Maas Geesteranus, No. 13440.

Cap: up to 22 mm across, at first convex with slightly deflexed margin, later on plano-convex to flat, often with depressed centre, white, later straw-yellow with ochraceous yellow centre, with felted-fibrillose sometimes shiny covering later on breaking up into small floccose scales.

Gills: rather distant, broadly adnate, broad, up to 5 mm wide, thick, whitish, later pink, with whitish subfimbriate edge.

Stem: 40-60 x 1.5-2 mm, white, becoming yellowish with age, shiny, smooth, glabrous except pruinose apex and tomentose base.

A rather common species in the Netherlands in often grassy-mossy places on poor soil (mostly sand).

Spores 9-11.5 x 6.5-8 μ , 5-6-sided. Pleurocystidia none; cheilocystidia few, 45-53 x 7-12 μ , irregularly clavate. Subhymenium not distinctive. Pilocystidia clavate. Caulocystidia in tufts, colorless, 38-71 x 9-12 μ , more or less clavate.

sericella ^{var. ~~st.~~ amara} ^{var. nov.} +
NOLANEA NO. 24543

Conch.

Pileus 2-3 cm. broad, [^]more or less umbonate, white, silky, ~~even~~.
Context white; odor mild, taste farinaceous-bitter.

Lamellae adnexed, flesh pink, medium broad to broad,
subdistant, lamellulae numerous.

Stipe 3-5 cm. x 2-3 mm., white, silky, equal.

Spores 9.5-12 x 7-9 (10) μ , ellipsoid to subglobose,
6-sided, at times obscurely 5- or 6-sided. Basidia 38-54 x
10-13 μ , 2-4-spored. Pleurocystidia clavate, often more or
less mucronate, 42-46 x 11-12 μ ; cheilocystidia 43-61 x 4-8 μ ,
conspicuous, cylindric, obclavate, often irregularly constricted.
Gill trama subparallel, hyphae 6-14 μ . Pileus trama radial.
Cuticle repent, with rather numerous loosely-tangled surface
hyphae, the terminal element clavate or cylindric, —cystidioid.
Clamps and lactifers none.

Cf. Ent. pinicola (U-T No. 21156) which lacks pl + ch.

E. repandus (see Fange) is slightly viscid, gills rather
narrow, spores \pm 7.5 μ .

E. speculum is larger, thicker-stiped, ~~odor~~ taste none,
smaller spores. E. sericellum has ~~stronger~~ ~~stronger~~ +
mild taste, \rightarrow

Except for taste this is the European (Swedish +
French) sericella.

25784

ENTOLOMA

sericella var. *amara* PHOTO

on soil, deciduous woods, Cades Cove, Aug. 15, 1963.

Pileus 1.5-4 cm broad, pale pinkish, densely covered by white appressed fibrils, ~~somewhat hygrophanous~~, slightly but distinctly zonate, even. Context ~~pallid~~ ^{whitish}, thin, fragile; odor fragrant (fruity), taste momentarily bitter then less so to nearly mild.

Lamellae emarginate, white, then "light pinkish cinnamon," broad, ventricose, close, lamellulae numerous, of 5 or 6 ranks.

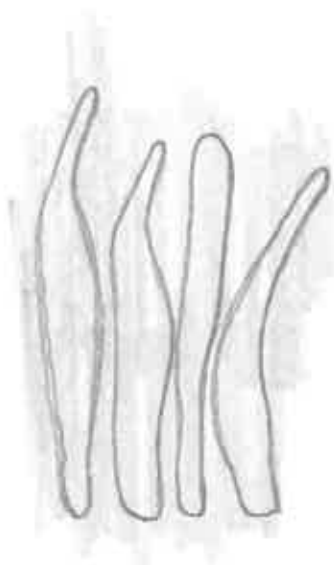
Stipe (2)3-8 cm x (1)2-4 mm, pallid, appressed fibrillose-striate, apex pruinose, equal, solid, base white-mycelioid.

Spores 9-11 x 7-9 μ , 5-sided, sometimes \pm obscurely 4-sided. Basidia 34-53 x 10-12 μ , (2)4-spored. Pleurocystidia 46-57 x 5-8 μ , ventricose or clavate to obclavate, usually with a neck, scattered, not always conspicuous; cheilocystidia 40-63 x 7-12 μ , ventricose with a neck. Gill trama subparallel, hyphae 2-5 μ , broad. Pileus trama radial. Cuticle repent. Pilocystidia none ^{found}. Clamps none. Caulocystidia none.

Near N. delicatula (Pk.) Sacc., in which the spores are 10-13 x 7-8 μ , 6-8-sided.

Same as Nolanea No. 24543.

(Leptonia)
Eutoloma sericella ^{var.} *amara*
25784



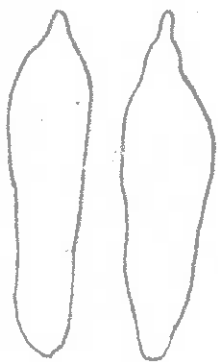
H - x 1000



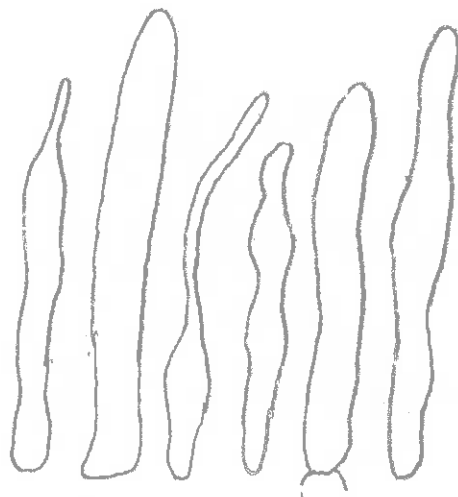
Ch - x 1000

~~Nolanea~~ No. 24543

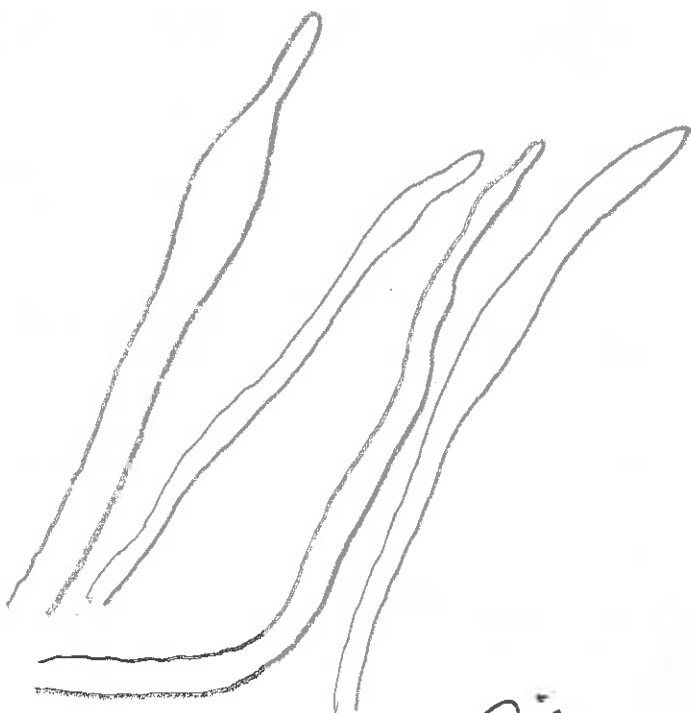
R. micellus var. *amara*



Gl - x 1000



Ch - x 1000



Pils - x 1000

25784 - *Eutoloma percellum* ^{rar.} ~~f.~~ amara rar. nor.
~~f. nor.~~

29238

RHODOPHYLLUS SERICELLUS var. SERICELLUS

Horse Cove, leg. L.R. Hesler, Aug. 10, 1966

White ~~and~~ ^{with} pink tint, Gills and stipe white.

Spores 9-12 x 6-7.5 μ , 6-8-sided, nodulose. Pleurocystidia and cheilocystidia present.

29334

RHODOPHYLLUS SERICELLUS var. SERICELLUS

Coweeta, N. C., Ron Petersen, Aug. 11, 1966

Pileus convex-conic, at times umbonate, disc depressed, white, becoming pinkish buff, silky, margin even. Context thin, white; odor and taste slight.

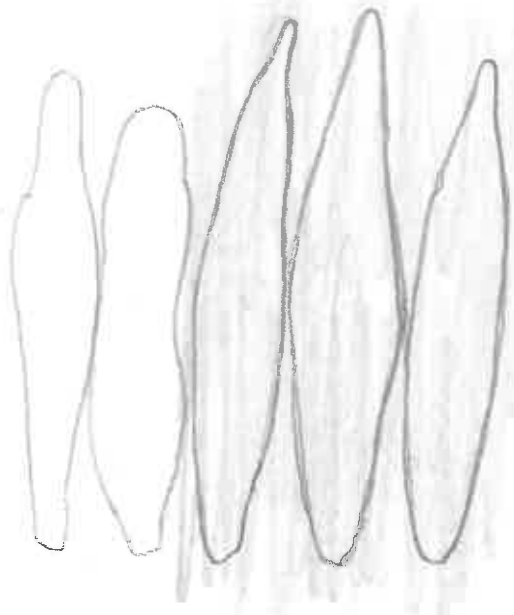
Lamellae adnexed, white, nearly subdistant, medium broad.

Stipe white, translucent, subglabrous, cartilaginous, hollow.

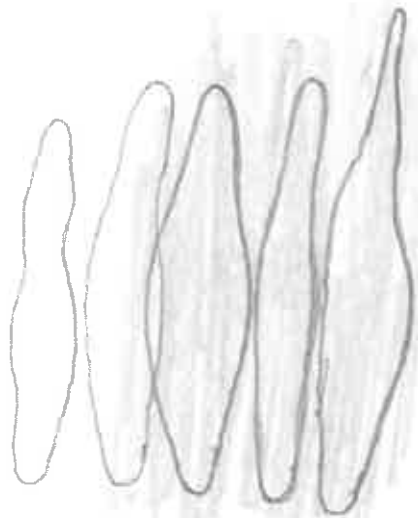
Spores 8.5-10(11) x 6-7 μ , 5-6(7)-sided. Basidia 30-38 x 9-10 μ , 2-4-spored. Pleurocystidia 58-73 x 11-15 μ , ventricose or clavate, often with a slender neck, absent from many gills; cheilocystidia 48-65 x 9-15 μ , ventricose, often with a slender neck. Gill trama subparallel, hyphae 4-10 μ broad. Subhymenium not distinctive. Pileus trama radial. Cuticle bearing colorless pilocystidia, similar to pleurocystidia. Caulocystidia similar to pleurocystidia. Clamp connections none.

Rhodophyllus sericellus var. *sericellus*

No. 29334



Pl - x 1000



Ch - x 1000